PROVOROV, K.L.; [illegible] K.V., [illegible], red.

[Radiogeodez[illegible]; [illegible] lektsii. Novosibirsk, Novosibirskii in-t inzhenerov geodezii, aer[illegible] i kart[illegible]fii. [illegible]

(MIRA [illegible])

ACC NR: AP7001458 (A) SOURCE CODE: UR/0413/66/000/021/0202/0202

INVENTOR: Kulikov, F. R.; Gurevich, S. M.; Anoshkin, N. F.; Moroznikova, S. V.; Blashchuk, V. Ye.; Kushnirenko, N. A.; Persidskiy, A. S.

ORG: none

TITLE: Electrode wire for titanium-alloy welding. Class 49, No. 188277

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 21, 1966, 202

TOPIC TAGS: electrode wire, titanium alloy, titanium alloy welding

ABSTRACT: This Author Certificate introduces a titanium-base electrode wire which contains 3.5—4.5% aluminum and 2.0—3.0% vanadium, with 1.4—1.6% zirconium added to improve the weld ductility. [ND]

SUB CODE: 13, 11/ SUBM DATE: 28Jul65/ ATD PRESS: 5110

Card 1/1 UDC: 621.791.042.2

ACC NR: AP7001459 (A) SOURCE CODE: UR/0413/66/000/021/0203/0203

INVENTOR: Gurevich, S. M.; Blashchuk, V. Ye.; Kulikov, F. R.; Persidskiy, A. S.; Kushnirenko, N. A.; Anoshkin, N. F.; Moroznikova, S. V.

ORG: none

TITLE: Electrode wire for welding titanium alloys. Class 49, No. 188278

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 21, 1966, 203

TOPIC TAGS: titanium alloy, ~~titanium alloy~~ metal welding, ~~titanium alloy~~ electrode ~~wire~~

ABSTRACT: This Author Certificate introduces a titanium alloy electrode wire which contains aluminum, iron, chromium, silicon, and boron. To increase the strength and ductility of welds in alloy sections up to 25 mm thick, the wire contains 1.4—1.6% zirconium while the content of other components is set as follows: 1.8—2.0% aluminum, 2.5—2.7% iron, 0.2—0.4% chromium, 0.1—0.15% silicon, and 0.05% boron. [ND]

SUB CODE: 13, 11/ SUBM DATE: 28Jul65/ ATD PRESS: 5110

Card 1/1 UDC: 621.791.042.2

MOROZOV, A.; GOLUBEV, S., kand.tekhn.nauk; KUGUSHEV, I., inzh.;
KHAYDUROV, I., inzh.

Standardized farm buildings made of mesh-reinforced concrete elements. Na stroi. Ros. no.11:32-34 N '61. (MIRA 16:7)

1. Deystvitel'nyy chlen Akademii stroitel'stva i arkhitektury SSSR (for Morozov).
(Farm buildings) (Precast concrete construction)

SMORODINOV, M.I.; MOROZOV, A.A.

Using radioisotopes to determine the density and moisture content of soils. Osn., fund. i mekh. grun. 7 no.5:7-9 '65.
(MIRA 18:10)

MOROZOV, A.A.; KISEL', N.A.

Extraction of a chloride complex of cadmium by the phase of liquid anion exchangers. Ukr. khim. zhur. 31 no.4:411-416 '65. (MIRA 18:5)

1. Odesskiy gosudarstvennyy universitet imeni Mechnikova.

MOROZOV, A.A., arkhitektor

Experiment of scale modeling of ships. Sudostroenie 31 no.1:62-66 Ja '65. (MIRA 18:3)

MOROZOV, A.A.; SURANOVA, [illegible]; N[illegible], [illegible]

Separation of iron and chromium in the presence of trilon B on anion and cation exchangers. Nauch. ezhegod. Khim. fak. Od. un. no.2:63-64 '63. (MIRA 17:8)

MOROZOV, A.A.; DRANITSKAYA, R.M.; [illegible]

Studies in the field of complex [illegible] sulfates. Nauch. ezhegod. Khim. fak. Od. un. [illegible] (MIRA [illegible])

MOROZOV, A.A.; OLENOVICH, N.L.; YERMILOVA, V.N.; YATSENKO, Ye.A.

Some physical and physicochemical properties of the SG-1 carboxyl cation exchanger. Nauch. ezhegod. Khim. fak. Od. un. no.2:74-78 '61. (MIRA 17:8)

MOROZOV, A.A.; GAVRIL'CHENKO, A.I.; SEMCHISHIN, V.S.

Surface compounds of iron thiocyanate on ion exchangers.
Nauch. ezhegod. Khim. fak. Od. un. no.2:78-82 '61.
(MIRA 17:8)

MOROZOV, A.

Basis for establishing the boundaries of brigade-served navigable river sections. Rech. transp. 23 no.12:33-34 D '64. (MIRA 18:6)

1. Novosibirskiy institut inzhenerov vodnogo transporta.

MOROZOV, A.

Flexural members from shale-ash cellular concrete with stressed reinforcement. Izv. AN Est. SSR. Ser. fiz.-mat. i tekh. nauk 12 no.3:344-348 '63. (MIRA 16:11)

1. Academy of Sciences of the Estonian S.S.R., Institute of Building and Building Materials.

MOROZOV, A.

Annual meeting of the Finnish-Soviet Chamber of Commerce.
Vnesh. torg. 43 no.1:39 '64. (MIRA 17:2)

AUTHORS: Morozov, A. A., [illegible], A. V., [illegible]
~~Skripov, F. I.~~

TITLE: Methods of Free Nuclear Induction in Weak Magnetic Fields as Applied to Some Problems of Radiospectroscopy Requiring Great Resolution Power (Metodika svobodnoy yadernoy induktsii v slabykh magnitnykh polyakh v primenenii k nekotorym zadacham radiospektroskopii vysokoy razreshayushchey sily)

PERIODICAL: Izvestiya Akademii nauk SSSR. Seriya fizicheskaya, 1958, Vol 22, Nr 9, pp 1141 - 1144 (USSR)

ABSTRACT: In the paper cited by reference 1 a new method of observation of free nuclear precession was found which permits to extend the investigations of this phenomenon to the region of very weak magnetic fields. This report gives two examples of the application of this method in radiospectroscopy. The first problem is the investigation of the fine structure of the nuclear resonance signals. This type of structure is caused by the indirect interaction of non-equivalent nuclei in the molecule.

Card 1/4

Methods of Free Nuclear Induction in Weak Magnetic Fields as Applied to Some Problems of Radiospectroscopy Requiring Great Resolution Power SOV/48-22-[illegible]

$O=P(-O-CH_2-CH_2-CH_2-CH_3)_3$ was chosen as specimen for the examination. When only the earth's magnetic field is present the chemical displacements disappear. Hence such splittings disappear which were caused by the indirect magnetic interaction between the proton groups (the condition $|\nu_A - \nu_B| \gg a/h$ not being satisfied). Such a simplification of the spectrum permits to emphasize the individual mutual nuclear actions (in this case H^1 and P^{31}). This is a great advantage offered by the method of weak fields. Notwithstanding the fact that the spectrum is simplified to a certain degree, a certain variety in the valence of the protons is still retained. It is caused by a different interaction with the P^{31} nucleus. This variety apparently is sufficient to permit the spin-spin bindings of the protons with each other to begin to exert a noticeable influence on the character of the spectrum. The interrelations of the resonance

Card 2/4

Methods of Free Nuclear Induction in Weak Magnetic Fields as Applied to Some Problems of Radiospectroscopy Requiring Great Resolution Power SOV/48-22-[illegible]

frequencies $\nu(F^{19})/\nu(H^1) = k(F^{19})/k\ (H^1)$ in the magnetic field of the earth were determined experimentally and the results were compared with evidence existing for the range of strong fields. After a generalization based upon several measurements these results were obtained:

CF_2CL - $CFCL_2$ and H_2O: $k(F^{19})/k(H^1)=0{,}940920 \pm 0{,}000020$;

$CFCL_3$ and H_2O: $k(F^{19})/k(H^1)= 0{,}940987 \pm 0{,}000030$.

The difference between the data for strong and for weak fields is only 0,0015% and does not exceed the experimental error. As regards the pair $CFCl_3$-water, no data are known for it in strong fields. Nevertheless it was possible to compute the chemical displacement of the signal F^{19} between CF_2Cl - $CFCl_2$ and $CFCl_3$ in the earth's magnetic field. The measurements of this quantity in strong fields (Ref 8) furnished a difference which also does not exceed the experimental error. There are 2 figures

Card 3/4

Methods of Free Nuclear Induction in Weak Magnetic Fields as Applied to Some Problems of Radiospectroscopy Requiring Great Resolution Power

SOV/48-22-[illegible]/40

and 8 references, 2 of which are Soviet.

ASSOCIATION: Nauchno-issledovatel'skiy fizicheskiy institut Leningradskogo gos.universiteta im.A.A.Zhdanova (Scientific Research Institute of Physics at the Leningrad State University imeni A.A.Zhdanov)

Card 4/4

AUTHORS: Mel'nikov A V ~~Morozov A A~~ 57-28-4-36/39
Rotshteyn A Ya Skripov F I
Smirnov S V.

TITLE: A Method of Free Nuclear Induction for Measuring Weak Magnetic Fields (Metodika svobodnoy yadernoy induktsii dlya izmereniya slabykh magnitnykh poley)

PERIODICAL: Zhurnal Tekhnicheskoy Fiziki 1958 Vol 28 Nr 4
pp 910 912 (USSR)

ABSTRACT: A laboratory apparatus for the measurement of weak magnetic fields according to the method of free nuclear induction was here set up and tested The fundamental data of this apparatus are given here The sender: the proton-resonance in distilled water (k=0 23483 Gauss/kilocycles, $T_2 \approx 3$ sec) was used The receiving coil had 8000 windings and formed part of the resonance circuit with a figure of merit of about 30 and a natural frequency variable around 2 kilocycles The auxiliary field was produced by a one-layered solenoid of a square cross sec=

Card 1/3

tion It was possible to use an amperage of up to 15 A in the case of 1 mm wire diameter which guaranteed an $H^* = 100$ Gauss The amplifier: from the input circuit the signal proceeds to the input of a three-cascade-R C amplifier with pentodes An amplification factor of about 10^5 was usually used The band width of the amplifier is about 3 kilocycles the effective band for the noise is determined by the circuit and is about 70 cycles The observation of the free nuclear induction When the signal is after the amplifier transmissed across a cathode follower to a loop-oscillograph the envelope curve of the signal is obtained on the picture in the case of a low velocity of the film At a high velocity it is also possible to dissolve individual oscillations For the exact frequency-measurement of the free nuclear induction the method of beating with the standardized frequency of 2142 3 cycles was employed The measurement of the field gradients: When 2 coils of a static free sender are fastened in points, where the magnetic field strength is different, due to the frequency difference of the precession in the signal of nuclear induction itself a beating forms whose frequency is a measure for the field difference The

A Method of Free Nuclear Induction for Measuring Weak Magnetic Fields 57-28-4-36/39

management of the Scientific Research Institute for Metrology and Yanovskiy, B. M. Professor, made it possible to perform the experiments in the rooms of the Magnetic Laboratory of the VNIIM in Kavgolovo. There are 1 figure and 10 references.

ASSOCIATION: Nauchno-issledovatel'skiy fizicheskiy institut Leningradskogo gosudarstvennogo universiteta (Leningrad, Scientific Research Institute for Physics of the State University). Vsesoyuznyy institut metodiki i tekhniki razvedki Ministerstva geologii i okhrany nedr (All-Union Institute for Geological Prospecting Methods and Techniques at the Ministery for Geology and Protection of Mineral Resources)

SUBMITTED: October 11, 1956

Card 3/3

MOROZOV, A. A.

"Strength Investigation of the Drums of Mine Hoisting Machines." Sub 26 May 47, Moscow Order of the Labor Red Banner Higher Technical School imeni N. E. Bauman (Cand Tech Sci)

Dissertations presented for degrees in science and engineering in Moscow in 1947.

SO: Sum.No. 457, 18 Apr 55

[illegible]

USSR / Human and Animal Physiology. Metabolism.

T

Abs Jour : Ref Zhur - Biol., No 15, 1958, No. 69780

Author : Morozov, A. A.
Inst : Kirghiz Agricultural Institute
Title : The State of Energy Metabolism in Cattle in Connection with the Reactivity of the Organism in Various Seasons of the Year

Orig Pub : Tr. Kirg. s.-kh. in-ta, 1956, No 9, 85-89

Abstract : In 12 cows divided into two groups (excitable and placid), gas exchange (GE) was studied in March, September and January. In both groups, the lowest values of GE were seen in September; in the excitable group the GE values were higher in March than in September by 4.1 percent, and higher in January by 11.5 percent. In the quiet group, these percentages were respectively 5.8 and 10.9. In comparing the indices of GE in both groups it was shown

Card 1/2

BAKLANOVSKAYA, A.N.; MOROZOV, A.A.

Spectral analysis of solutions by the spark excitation of aerosols. Zav.lab. 28 no.11:1332-1333 '62. (MIRA 15:11)

1. Odesskiy gosudarstvennyy universitet imeni I.I.Mechnikova.
(Electrolytes--Spectra) (Aerosols)

L 17275-63 BDS

ACCESSION NR: AP3004367 S/0109/63/008/008/1334/1343

AUTHOR: Kuleshov, V. N.; Morozov, A. A.

45

TITLE: Investigation of a phase-lock pulse system

SOURCE: Radiotekhnika i elektronika, v. 8, no. 8, 1963, 1334-1343

TOPIC TAGS: phase lock, pulse-type phase lock

ABSTRACT: A pulse system of phase AFC (phase lock) is considered which adjusts the local oscillator according to the frequency of coherent radio pulses that have a low duty factor. A block diagram of the pulse-type phase lock consists of the following components: phase detector, pulse filter, storage device, low-frequency filter, frequency controller, and controlled oscillator. Nonlinear operational and difference equations describing the pulse phase lock are obtained by a discrete Laplace transformation method. A general characteristic equation is set up, and a formula describing the noise band of the lock is developed. A

Card 1/2

L 17275-63

ACCESSION NR: AP3004367

0

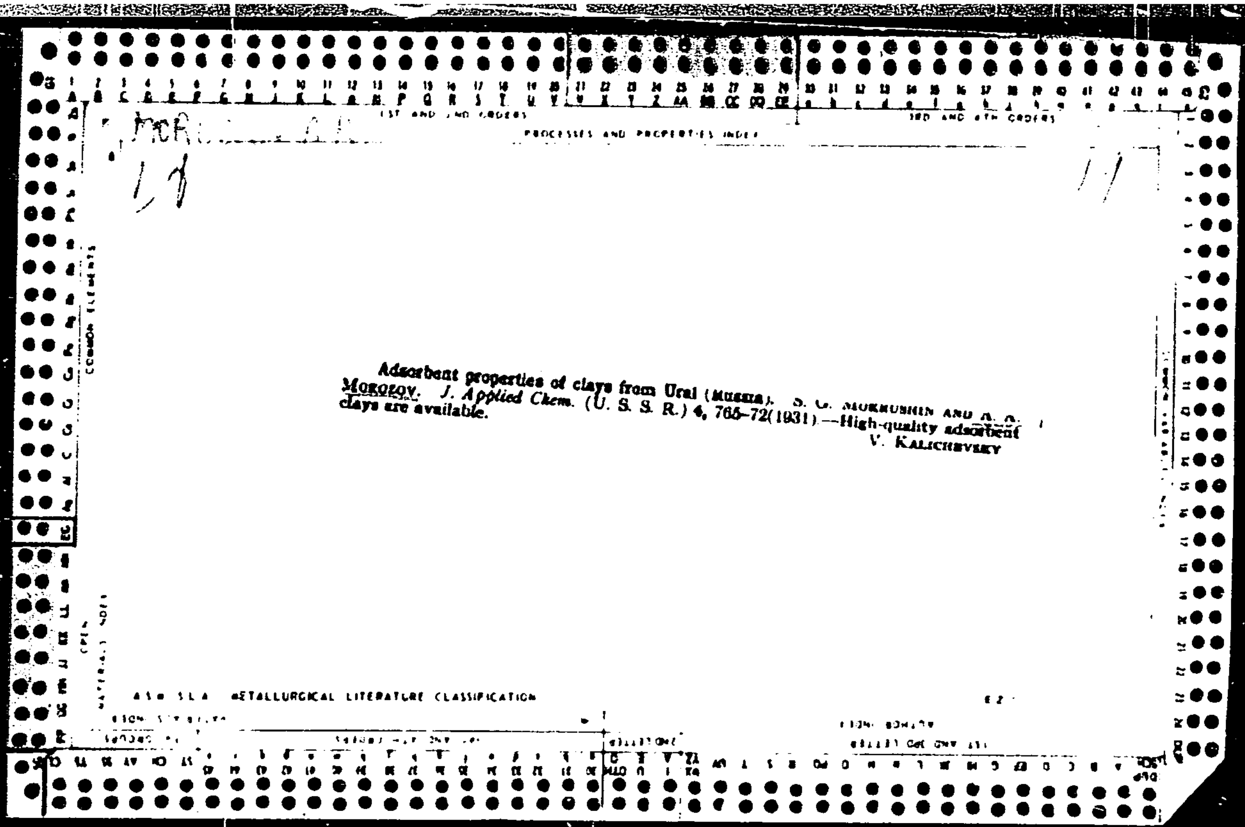
method for the numerical investigation of the locking process is given. A most simple locking system is described as an example. "The authors are grateful to S. I. Yevtyanov for going over the manuscript and his valuable comments." Orig. art. has: 4 figures and 27 formulas.

ASSOCIATION: none

SUBMITTED: 07Jul62 DATE ACQ: 20Aug63 ENCL: 00

SUB CODE: CO, GE NO REF SOV: 004 OTHER: 000

Card 2/2



1ST AND 2ND ORDERS

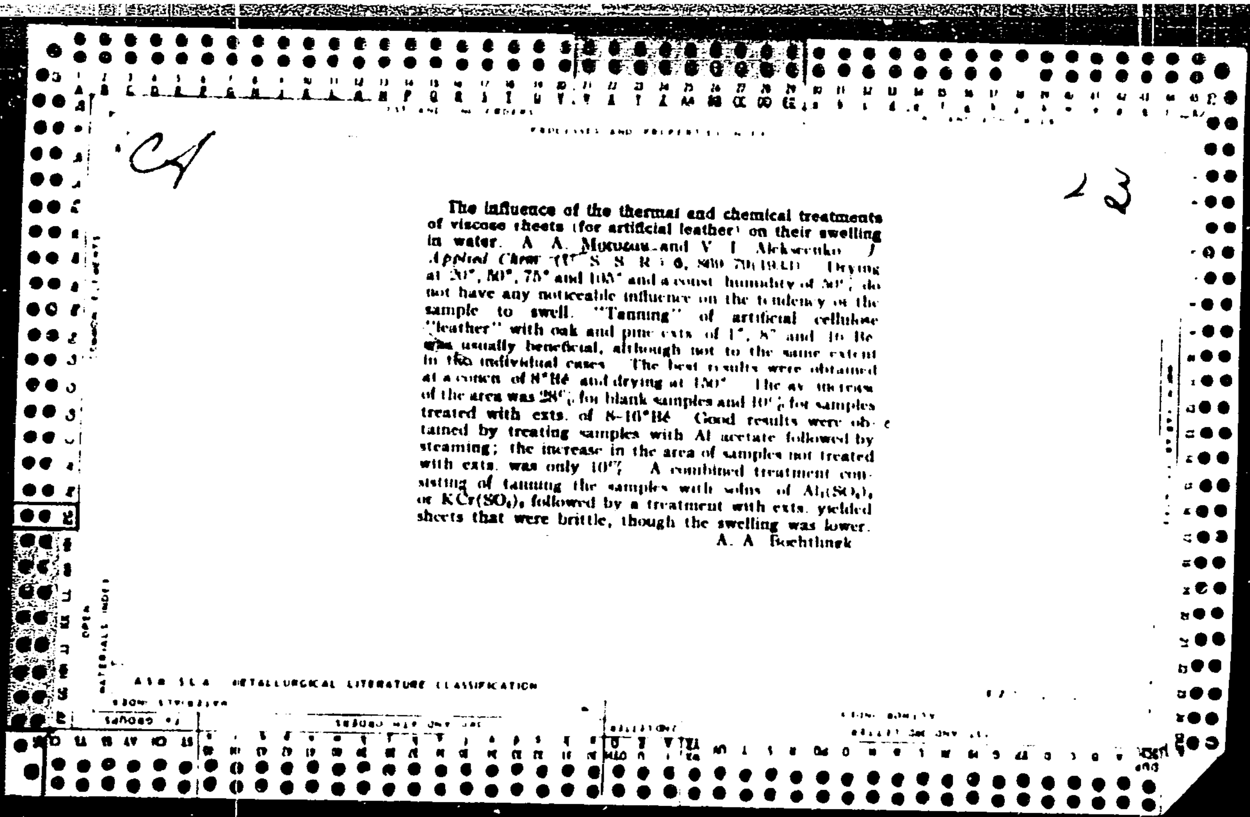
PROCESSES AND PROPERTIES INDEX

3RD AND 4TH ORDERS

Adsorbent properties of clays from Ural (Russia). S. G. Mokrushin and A. A. Morozov. *J. Applied Chem.* (U. S. S. R.) 4, 765-72(1931).—High-quality adsorbent clays are available.

V. Kalichevsky

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION



PROCESSES AND PROPERTIES INDEX

CA

23

The influence of the thermal and chemical treatments of viscose sheets (for artificial leather) on their swelling in water. A. A. Morozov and V. I. Alekseenko. *J. Applied Chem.* (U. S. S. R.) 6, 880-90(1933). Drying at 20°, 50°, 75° and 105° and a const. humidity of 50% do not have any noticeable influence on the tendency of the sample to swell. "Tanning" of artificial cellulose "leather" with oak and pine exts. of 1°, 8° and 10 Bé was usually beneficial, although not to the same extent in the individual cases. The best results were obtained at a concn. of 8°Bé and drying at 150°. The av. increase of the area was 28% for blank samples and 10% for samples treated with exts. of 8-10°Bé. Good results were obtained by treating samples with Al acetate followed by steaming; the increase in the area of samples not treated with exts. was only 10%. A combined treatment consisting of tanning the samples with solns. of $Al_2(SO_4)_3$ or $KCr(SO_4)_2$ followed by a treatment with exts. yielded sheets that were brittle, though the swelling was lower.

A. A. Boehtlingk

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

CA

1ST AND 2ND ORDERS

PROCESSES AND PROPERTIES INDEX

3RD AND 4TH ORDERS

2

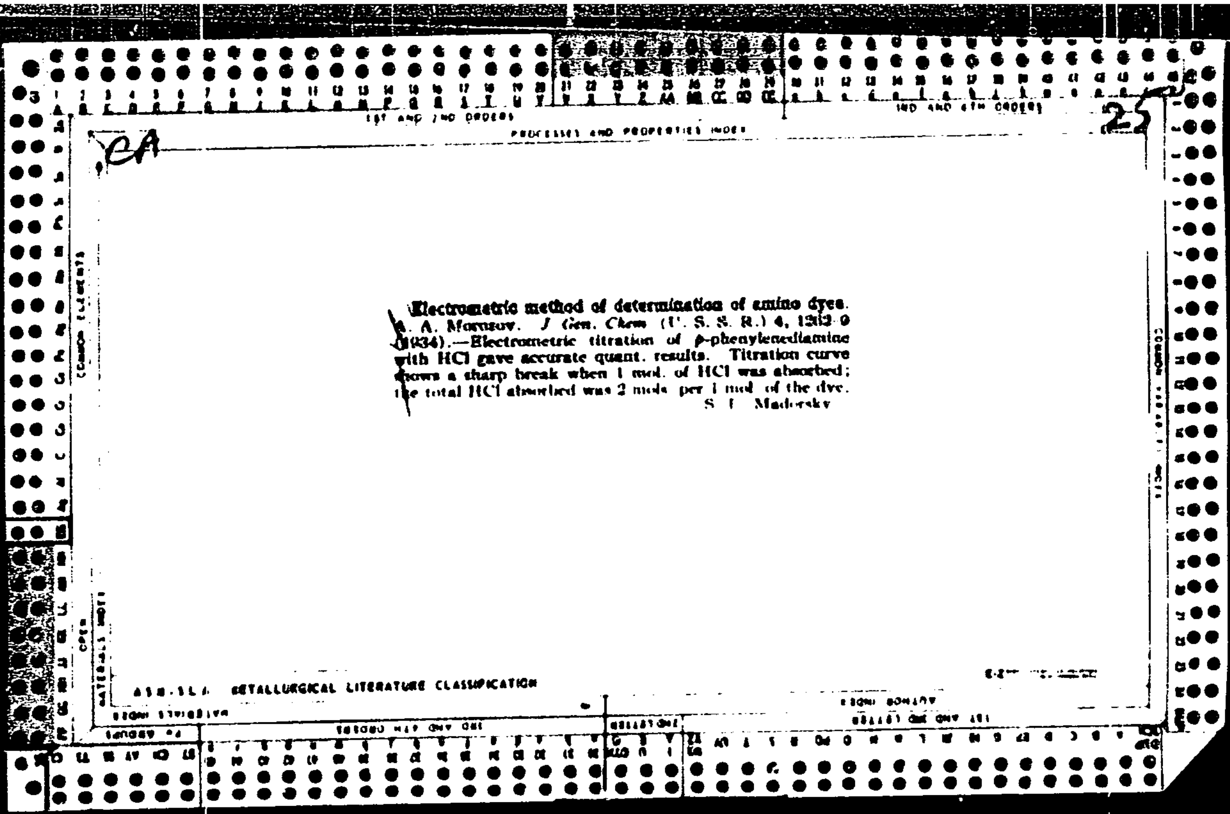
The structure of colloidal particles. III. Electrochemical properties of atacamite. I. N. Putilova. *J. Gen. Chem.* (U. S. S. R.) 4, 80- (1934); cf. *C. A.* 27, 884.—Atacamite hydrosols were made by mixing equal vols. of 0.1 *M* $Cu(OAc)_2$ and 0.[illegible] *M* NaCl. When the sols were dild. and then ultrafiltered, the elec. cond. of the ultrafiltrates did not decrease as fast as the concn. of the sol; beyond a certain diln., however, a proportionate decrease was observed. When the sol was ultrafiltered and the ultrafiltrate dild., the cond. decreased in the same ratio as the concn. Hence diln. of the sol caused the micelles to lose Cu and OAc ions to the dispersion medium; a 4-fold increase in vol. removed the whole of the $Cu(OAc)_2$ held by the colloid. The cond. of the micellar portion (cond. of the sol minus the cond. of the ultrafiltrate) decreased very little with the concn. and at higher dilns. must have been due to the ionization of atacamite. The cond. of the satd. soln. of atacamite was calcd. from the cond. of the ultrafiltrate at higher dilns.; the soly. (calcd. from the cond.) was approx. 0.00850 g. per l. Diln. of the sol with 0.001 *N* $Cu(OAc)_2$ increased the micellar cond. about 100 times; the cond. of the ultrafiltrate showed that the micelles adsorbed Cu acetate. The amt. adsorbed is practically independent of the amt. of the dispersed phase; hence the particles must subdivide with a consequent increase in the total surface. The structural unit of the micelle is $\left\{\left[\left(Cu\begin{smallmatrix}OH\\OH\end{smallmatrix}\right)Cu\right]\begin{smallmatrix}OH\\Cl\end{smallmatrix}\right\}_m Cu(AcO)_2\Big\{_n Cu^{++}$. **IV. Electrochemical study of atacamite.** A. A. Morozov. *Ibid.* 86-103.—When the solns. of $Cu(OAc)_2$ and NaCl are mixed, the elec. cond. drops sharply (formation of complex mols. of atacamite) and continues to decline slowly (growth of the nuclei). Changes in the cond. with the diln. of the sol and ultrafiltrate show that the latter contains fully dissocd. electrolytes only (probably $CuCl_2$). Undissocd. mols. are present in the concd. sols. The

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

addn. of dialyzed atacamite sols decreases the cond. of $Cu(OAc)_2$ solns., also of mixts. of $Cu(OAc)_2$ and NaCl solns. The effect is due to adsorption of the electrolytes by the colloid. The addn. of electrolytes to the sols decreases the charge. The liminal value for NaCl is 0.08, for Na_2SO_4 0.00025 equivs. per l. The sols pptd with NaCl can redisperse (pptn. due to common-ion effect decreasing the ionization of the double layer). Na_2SO_4 coagulates irreversibly (destruction of the double layer). Chem. analysis of the sols, together with the above observations, suggests the following structure for the colloid particles of atacamite:

$$\cdot\Big\}\left[\mathrm{Cu}\left(\begin{matrix}\mathrm{OH}\\ \mathrm{OH}\end{matrix}\mathrm{Cu}\right)_{\cdot}\right]\begin{matrix}\mathrm{Cl}\\ \mathrm{Cl}\end{matrix}\Big\{_{\cdot}\ \mathrm{CuCl_2}.\ m\mathrm{Cu}^{++}\,2\mathrm{Cl}^{-}$$

B. Sovenkoff



1ST AND 2ND ORDERS
PROCESSES AND PROPERTIES INDEX
3RD AND 4TH ORDERS

CA

25

Electrometric method of determination of amino dyes. A. A. Morozov. *J. Gen. Chem.* (U. S. S. R.) 4, 1312-9 (1934).—Electrometric titration of *p*-phenylenediamine with HCl gave accurate quant. results. Titration curve shows a sharp break when 1 mol. of HCl was absorbed; the total HCl absorbed was 2 mols. per 1 mol. of the dye.

S. L. Madorsky

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

1ST AND 2ND ORDERS

PROCESSES AND PROPERTIES INDEX

3RD AND 4TH ORDERS

ca

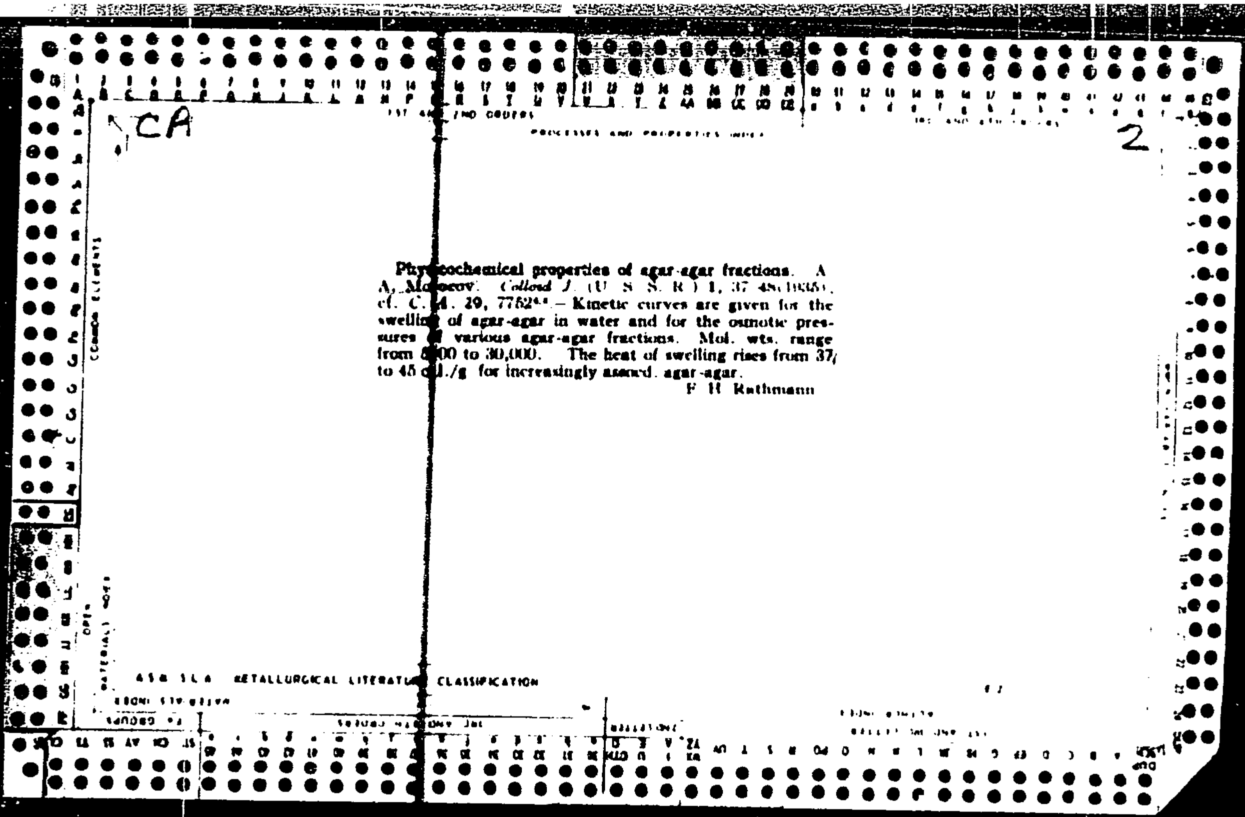
23

Swelling of Cellophane in water. A. A. Morozov. *J. Applied Chem.* (U. S. S. R.) 7, 1230-40(1934); cf. *C. A.* 28, 3863^{4}.—A Cellophane prepd. from a viscose which was aged in water only for 2 days increased its weight at 25° by 50%, while viscose films which were aged for 12 days by swelling under the same conditions adsorbed 70% calcd. on the dry wt. of the cellulose. The swelling of Cellophane is lowered on repeating. One third of the water adsorbed by Cellophane combines chemically with the latter. The expts. are described. A. A. B.

COMMON ELEMENTS

MATERIALS INDEX

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION



CA

2

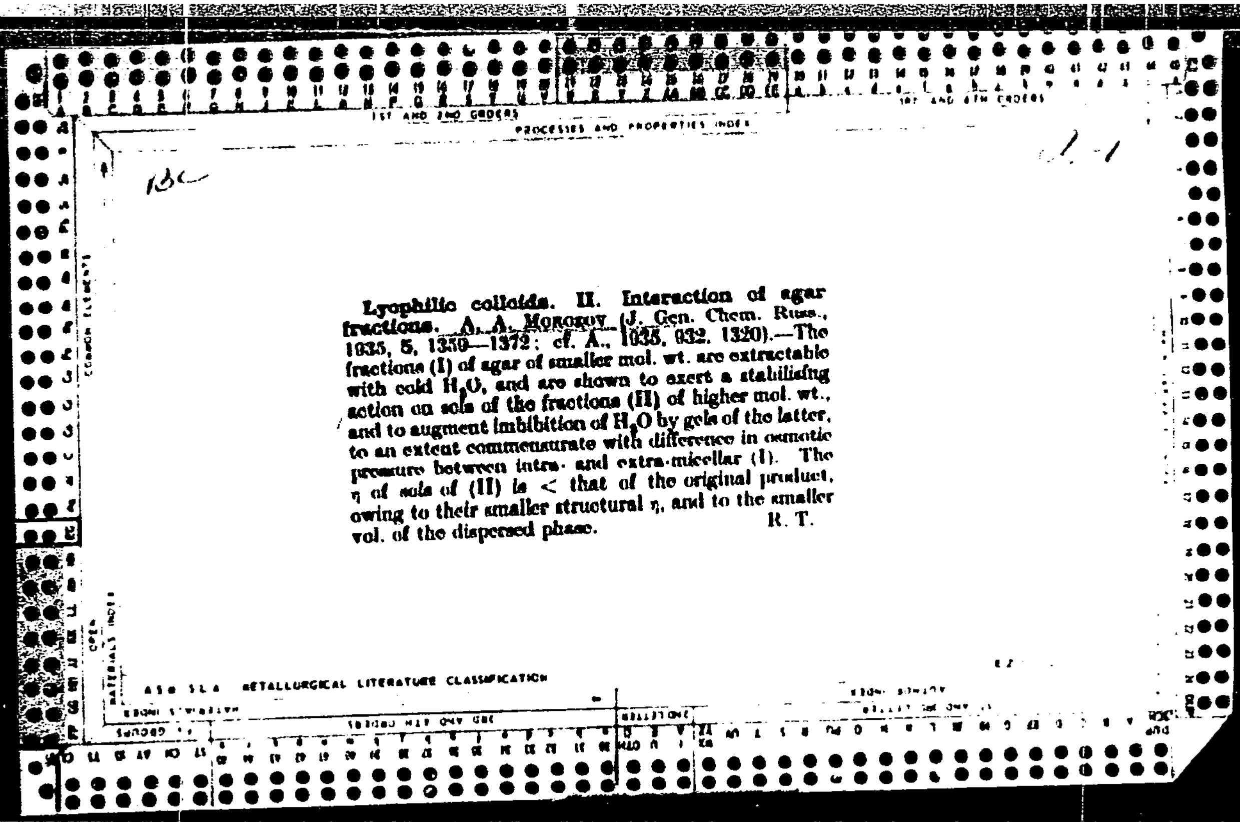
1ST AND 2ND ORDERS

PROCESSES AND PROPERTIES INDEX

Physicochemical properties of agar-agar fractions. A. A. Mo[illegible]ozov. *Colloid J.* (U. S. S. R.) 1, 37-48(1935); cf. C. A. 29, 7762.—Kinetic curves are given for the swelling of agar-agar in water and for the osmotic pressures of various agar-agar fractions. Mol. wts. range from [illegible]00 to 30,000. The heat of swelling rises from 37 to 45 cal./g. for increasingly assocd. agar-agar.

F. H. Rathmann

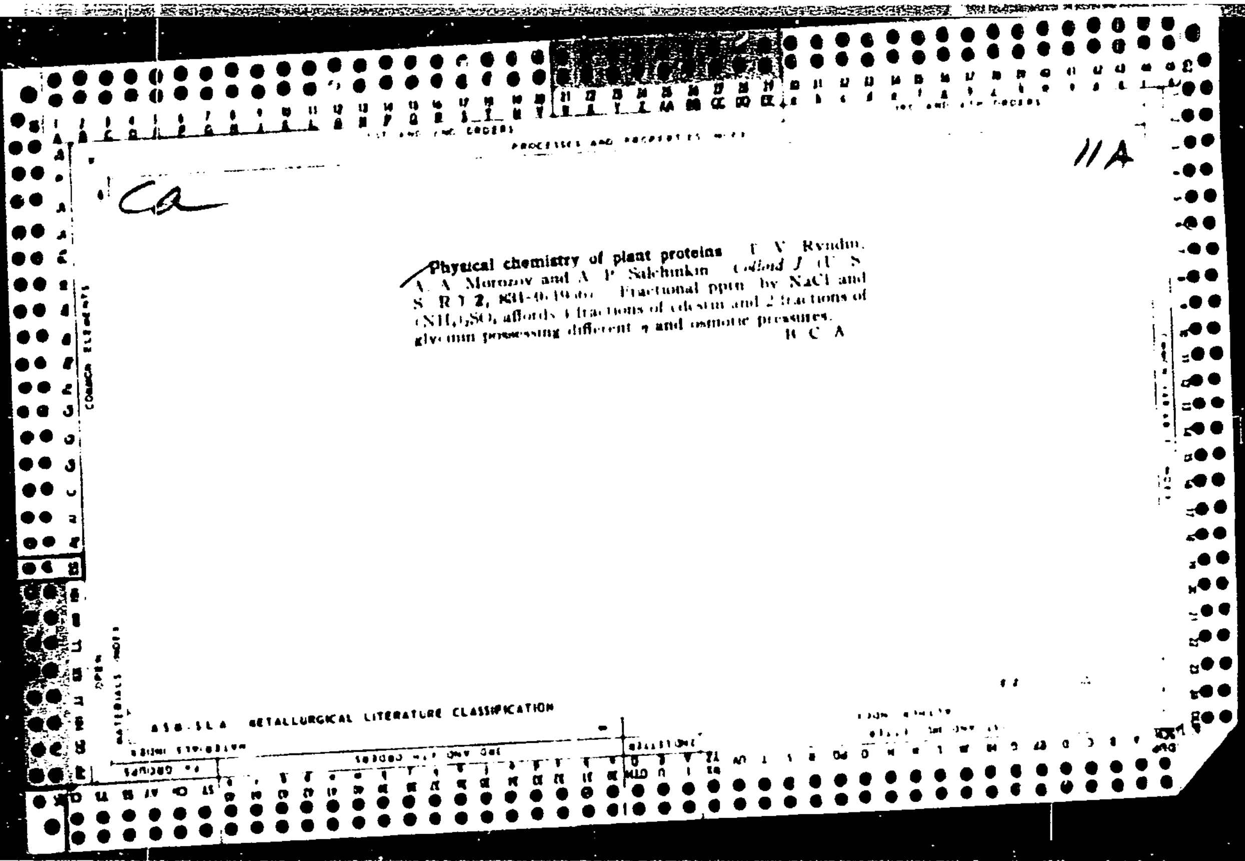
ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION


1ST AND 2ND ORDERS
PROCESSES AND PROPERTIES INDEX
3RD AND 4TH ORDERS
ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

BC

2-1

Lyophilic colloids. II. Interaction of agar fractions. A. A. Morozov (J. Gen. Chem. Russ., 1935, 5, 1359—1372; cf. A., 1935, 932, 1320).—The fractions (I) of agar of smaller mol. wt. are extractable with cold H_2O, and are shown to exert a stabilising action on sols of the fractions (II) of higher mol. wt., and to augment imbibition of H_2O by gels of the latter, to an extent commensurate with difference in osmotic pressure between intra- and extra-micellar (I). The η of sols of (II) is $<$ that of the original product, owing to their smaller structural η, and to the smaller vol. of the dispersed phase. R. T.



Ca

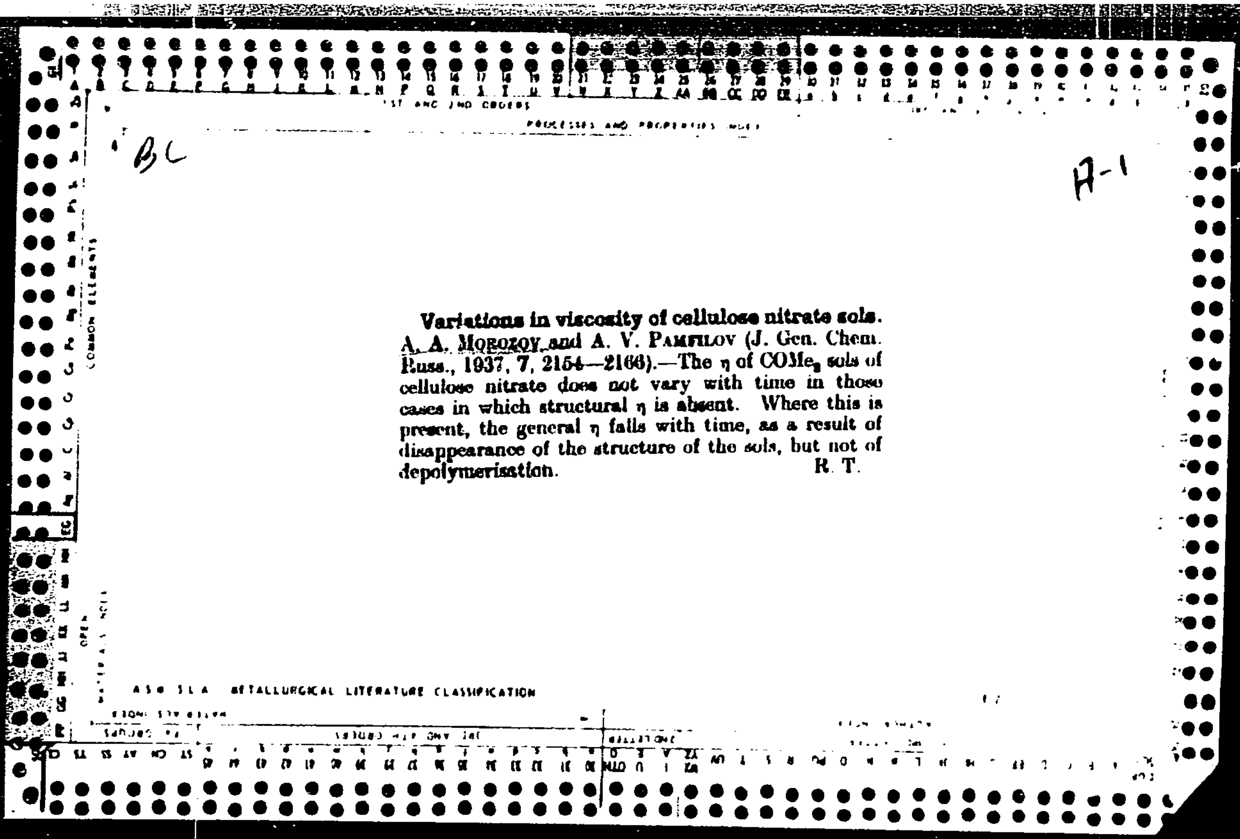
11A

PROCESSES AND PROPERTIES INDEX

Physical chemistry of plant proteins. I. V. Ryndin, A. A. Morozov and A. P. Salchinkin. *Colloid J.* (U. S. S. R.) **2**, 881-6(1936). Fractional pptn. by NaCl and $(NH_4)_2SO_4$ affords 4 fractions of edestin and 2 fractions of glycinin possessing different η and osmotic pressures.

H. C. A.

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION



1ST AND 2ND ORDERS

PROCESSES AND PROPERTIES INDEX

BC

A-1

Variations in viscosity of cellulose nitrate sols. A. A. Morozov and A. V. Pamfilov (J. Gen. Chem. Russ., 1937, 7, 2154—2166).—The η of $COMe_2$ sols of cellulose nitrate does not vary with time in those cases in which structural η is absent. Where this is present, the general η falls with time, as a result of disappearance of the structure of the sols, but not of depolymerisation. R. T.

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

1ST AND 2ND ORDERS

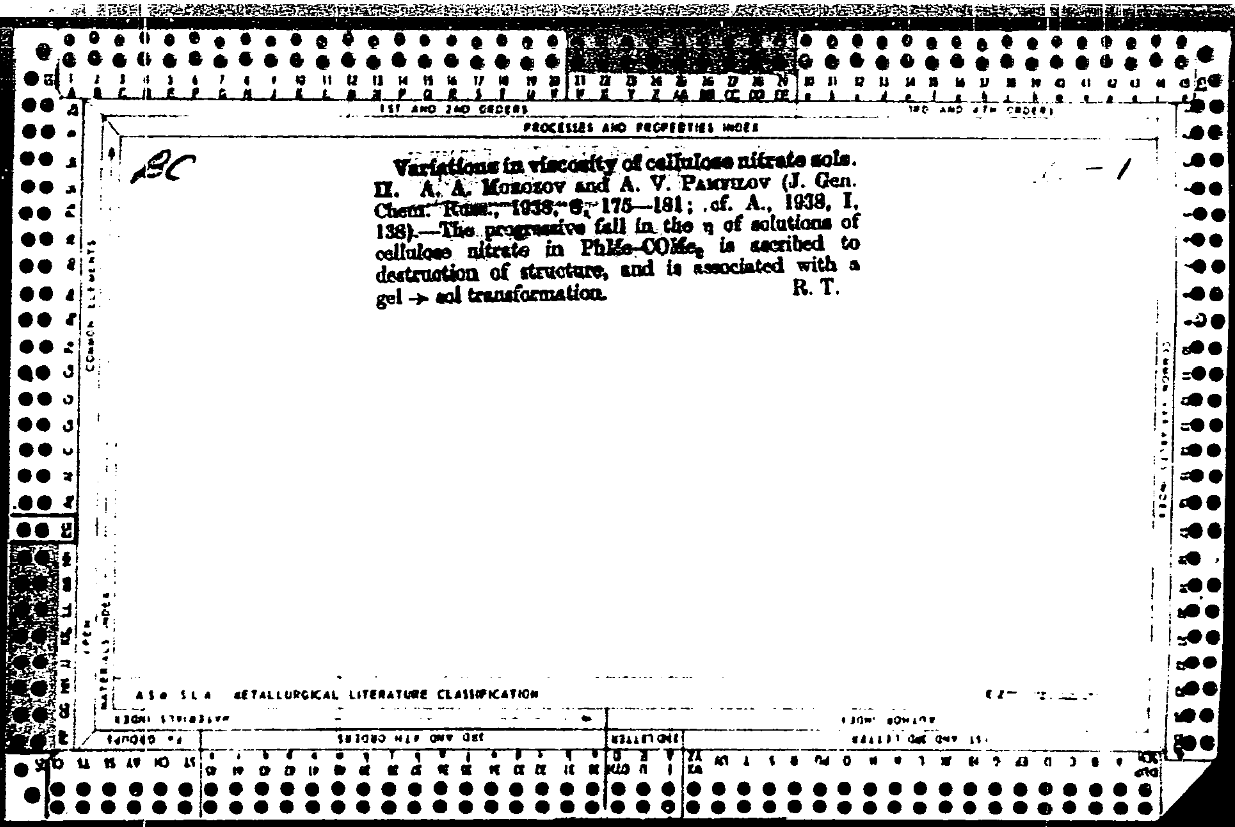
PROCESSES AND PROPERTIES INDEX

3RD AND 4TH ORDERS

CA

The use of ultrasonic energy for dispersion processes
Preparation of aqueous emulsions without the use of a
stabilizer. A. A. Morozov. *Syell. Ivanovo Nauch. Is-*
sledovatel. Inst. 1938, No. 4-5, 105; *Khim. Referat. Zhur.*
2, No. 4, 19(1939).—Paraffin emulsions were prepd. with-
out addn. of stabilizers in an ultrasonic field. With in-
creasing quantities of paraffin, the concn. of the emulsion
reached a max. at a proportion of 1:1 by wt. of the com-
ponents of the mixt. The concn. of emulsion reached
0.4% on irradiation for 40 min. The degree of dispersion
(1-5 μ, with a predominant diam. of the particles of 1.5
μ) increased simultaneously. The concn. increased
nearly twofold with an increase of the intensity of the
ultrasound, produced by increasing the tension on the
quartz plate from 1.6 to 2.2 kv. Increased concns. of
emulsions were obtained in the following order: 2% Na
acetate < 7% C_2H_5OH < 0.5 *N* Na citrate < 4% formalin
< distd. water < 10% glycerol < 10% acetone < 10%
C_4H_9OH. W. R. Henn

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

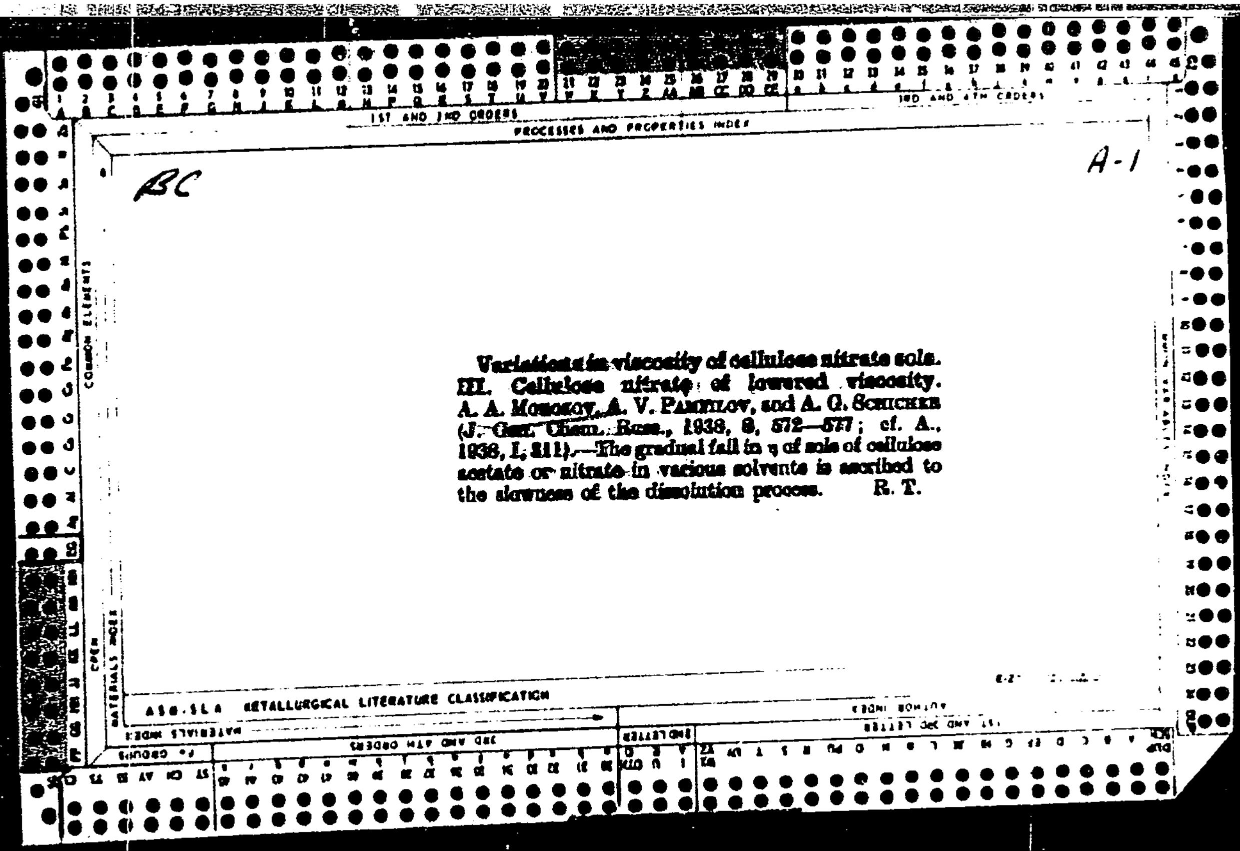


1ST AND 2ND ORDERS
3RD AND 4TH ORDERS
PROCESSES AND PROPERTIES INDEX
ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

BC

-1

Variations in viscosity of cellulose nitrate sols. II. A. A. Morozov and A. V. Pamfilov (J. Gen. Chem. Russ., 1938, 8, 175—181; cf. A., 1938, I, 138).—The progressive fall in the η of solutions of cellulose nitrate in PhMe-COMe$_2$ is ascribed to destruction of structure, and is associated with a gel → sol transformation. R. T.



1ST AND 2ND ORDERS

3RD AND 4TH ORDERS

PROCESSES AND PROPERTIES INDEX

BC

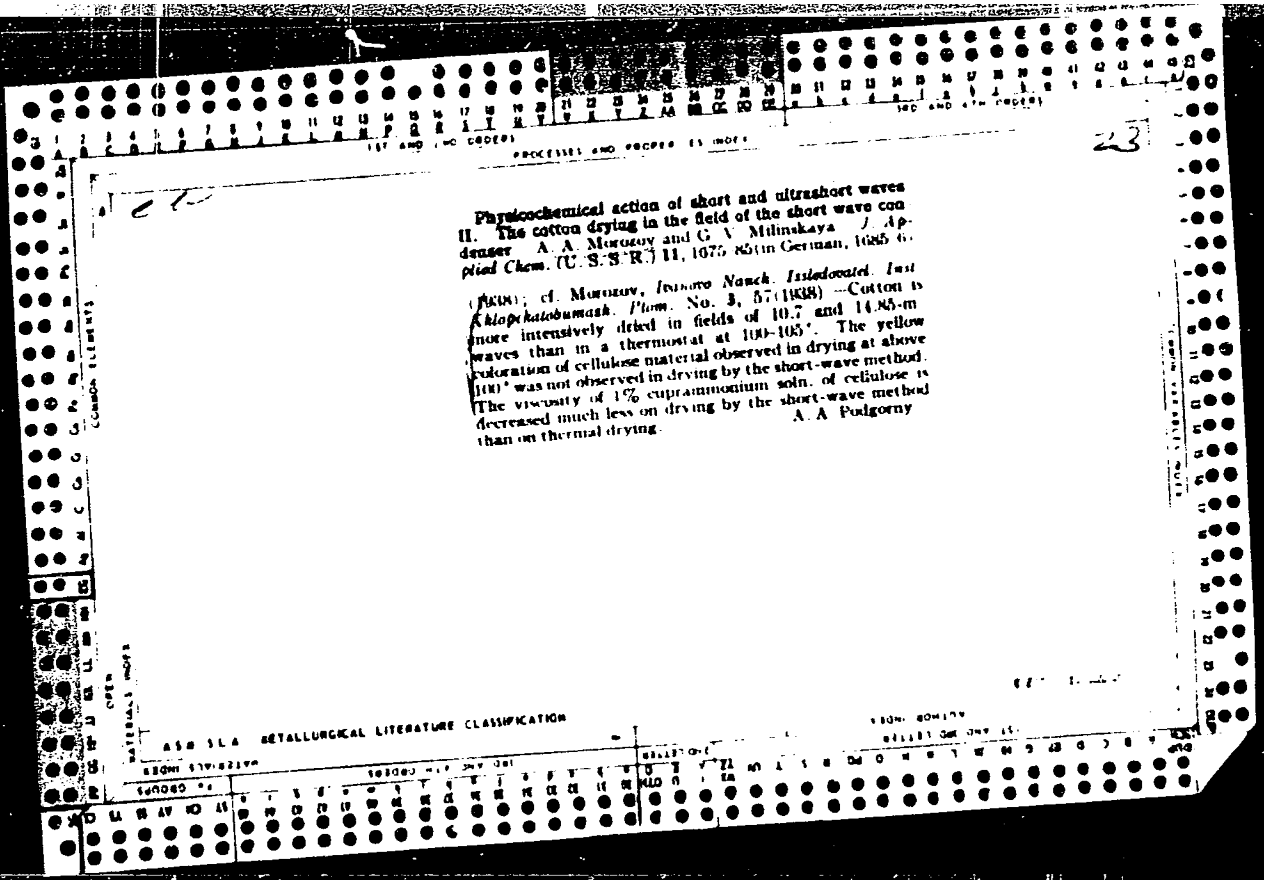
A-1

Variations in viscosity of cellulose nitrate sols. III. Cellulose nitrate of lowered viscosity. A. A. MOROZOV, A. V. PAMFILOV, and A. G. SCHICHER (J. Gen. Chem. Russ., 1938, 8, 572—577; cf. A., 1938, I, 211).—The gradual fall in η of sols of cellulose acetate or nitrate in various solvents is ascribed to the slowness of the dissolution process. R. T.

COMMON ELEMENTS

MATERIALS INDEX

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION



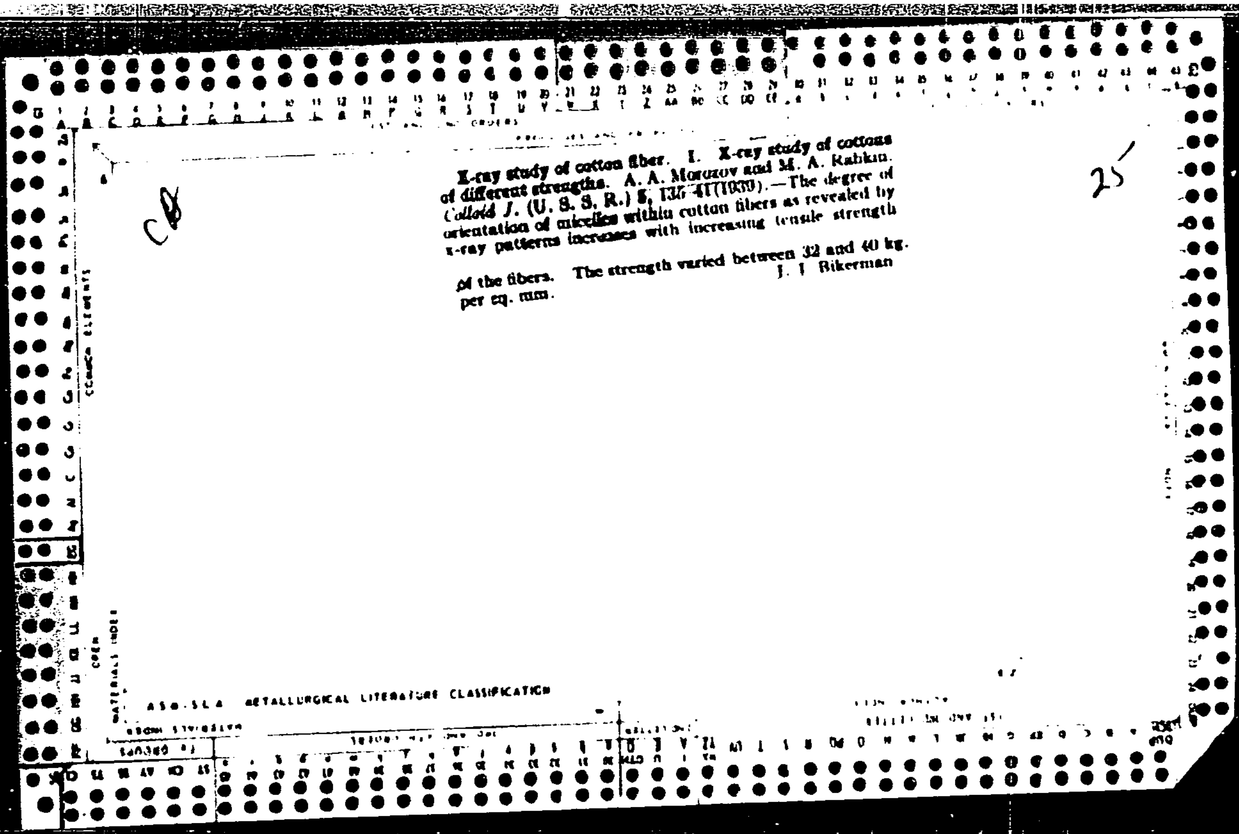
23

1ST AND 2ND ORDERS

PROCESSES AND PROPERTIES INDEX

Physicochemical action of short and ultrashort waves II. The cotton drying in the field of the short wave condenser A. A. Morozov and G. V. Milinskaya *J. Applied Chem.* (U. S. S. R.) 11, 1075 85 (in German, 1085 6) (1938); cf. Morozov, *Ivanovo Nauch. Issledovatel. Inst Khlopchatobumash. Prom.* No. 3, 57 (1938) —Cotton is more intensively dried in fields of 10.7 and 14.85-m waves than in a thermostat at 100-105°. The yellow coloration of cellulose material observed in drying at above 100° was not observed in drying by the short-wave method. The viscosity of 1% cuprammonium soln. of cellulose is decreased much less on drying by the short-wave method than on thermal drying. A. A. Podgorny

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

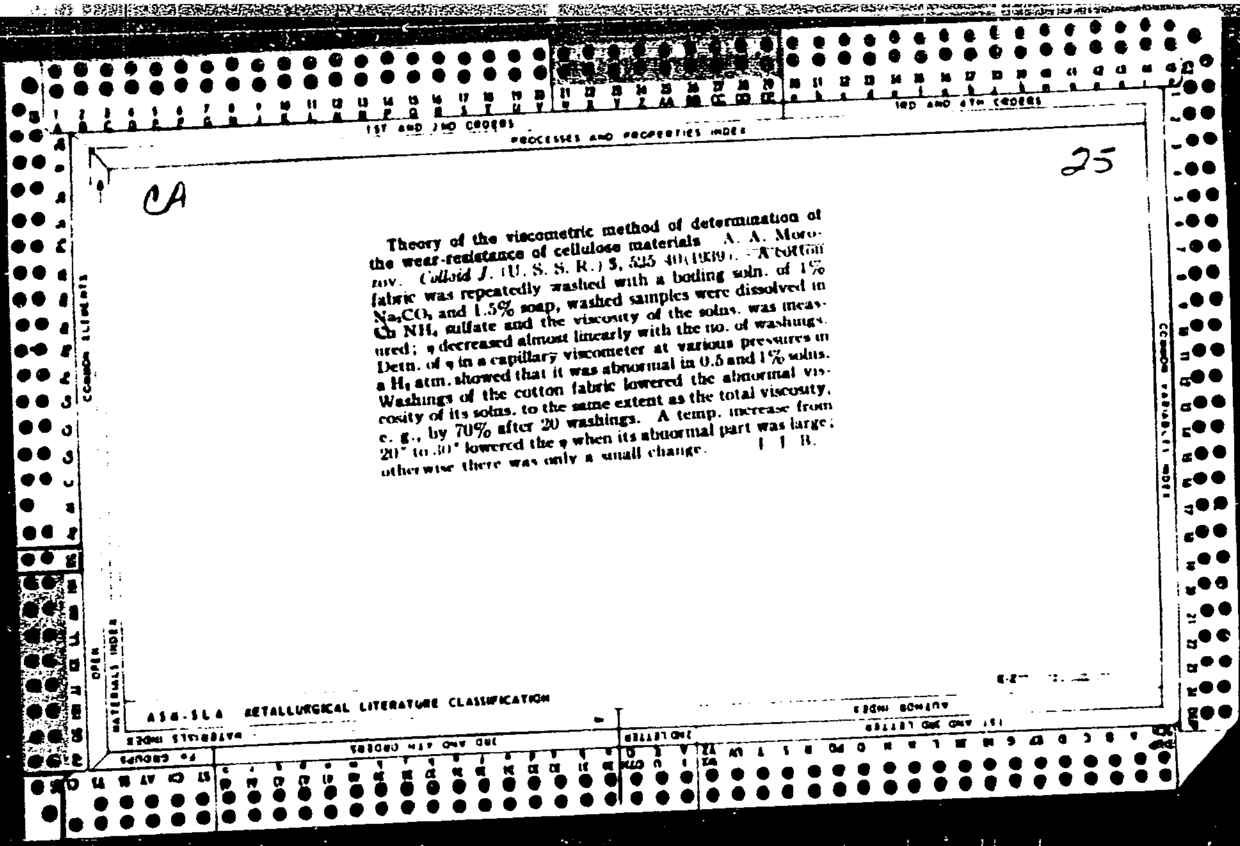


25

X-ray study of cotton fiber. I. X-ray study of cottons of different strengths. A. A. Morozov and M. A. Rabkin. *Colloid J.* (U. S. S. R.) 5, 135-41(1939).—The degree of orientation of micelles within cotton fibers as revealed by x-ray patterns increases with increasing tensile strength of the fibers. The strength varied between 32 and 40 kg. per sq. mm.

J. I. Bikerman

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION


1ST AND 2ND ORDERS
PROCESSES AND PROPERTIES INDEX
3RD AND 4TH ORDERS
ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

CA

25

Theory of the viscometric method of determination of the wear-resistance of cellulose materials. A. A. Morozov. *Colloid J.* (U. S. S. R.) 5, 535-40(1939). —A cotton fabric was repeatedly washed with a boiling soln. of 1% Na_2CO_3 and 1.5% soap, washed samples were dissolved in Cu NH_4 sulfate and the viscosity of the solns. was measured; η decreased almost linearly with the no. of washings. Detn. of η in a capillary viscometer at various pressures in a H_2 atm. showed that it was abnormal in 0.5 and 1% solns. Washings of the cotton fabric lowered the abnormal viscosity of its solns. to the same extent as the total viscosity, e. g., by 70% after 20 washings. A temp. increase from 20° to 30° lowered the η when its abnormal part was large; otherwise there was only a small change. J. J. B.

1ST AND 2ND ORDERS

3RD AND 4TH ORDERS

PROCESSES AND PROPERTIES INDEX

CA

2

Viscosity of products of fractioning of cotton cellulose. A. A. Morozov. *Colloid J.* (U. S. S. R.) 5, 691-700 (1939); cf. preceding abstr.—Cotton (10 g.) was warmed with 1% NaOH and then kept for 20 hrs. in 1 l. of a soln. (I) contg. 1.35% of Cu, 15.5% of NH_3, and 0.2% of sucrose, or in 1 l. of this soln. dild. with 1/4, 1, 1 1/2, or 2 vols. of H_2O. The resulting mixts. were injected into dil. AcOH soln. through a Cu gauze; the part remaining on the gauze was termed "insol. fraction" and that pptd. outside the gauze, "sol. fraction." Solns. of "sol. fractions" in I had higher viscosities than those of "insol. fractions" but the difference (and the values of both viscosities) decreased with the vol. of H_2O added to I. The structural part and the temp. coeff. of η also increased with diln. of the initial Cu NH_3 soln., while the I no. of "insol. fractions" decreased.
J. J. Bikerman

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

2

The viscosity changes of cellulose nitrate solutions. VI. A. A. Morozov and A. V. Pamfilov. *J. Gen. Chem.* (U. S. S. R.) 9, 750-65(1939); cf. C. A. 33, 6110.

The viscosities of 0.5, 1 and 2% cellulose nitrate solns. in acetone and acetone-toluene were detd. immediately after dissolving and after certain intervals of time. Conclusions: The structural viscosity, especially in concd. solns., represents about 20-90% of the total effect of the observed viscosity, detd. at pressures of the order of 10 mm. of Hg. Decrease of viscosity with time is caused by a decrease in the structural viscosity only. Twenty-two references. M. M. Podgorny

METALLURGICAL LITERATURE CLASSIFICATION

MOROZOV, A. A.

USSR/Chemistry - Nitrocellulose
Chemistry - Viscosity

Sep 1946

"The Viscosity of Nitrocellulose and Cellulose Solutions," A. V. Pamfilov, A. A. Morozov, M. A. Rabkin, 11 pp

"Zhur Prik Khim" Vol XIX, No 9

The role of the structure-forming processes in the phenomena of transformation of nitrocellulose solutions, in connection with the problem of classifying lyophile colloids.

PA 13T29

CA

Mixtures of hydrophilic colloids. I. Physico-mechanical properties of starch-agar jellies and sols. A. A. Morozov and S. T. Ogorodnik (Univ., Czernovitz). *Kolloid. Zhur.* 12, 452-9(1950).—The yield point *P* of gels was detd. by the conical plastometer of Segalova and Rebinder (*C.A.* 43, 7779c). *P* was, e.g., 3.31 g./sq. cm. in 6.7% starch gel and in 0.7% agar gel, and 6.24, 9.60, 12.80, and 15.82 g./sq. cm. in 10% and 1.0%, 12% and 1.1%, 13% and 1.3%, and 13.7% and 1.5% starch and agar gels, resp. When these "equally stiff" gels were mixed (by dissolving a suspension of native starch granules in a boiling agar soln.) in ratios ranging from 1:9 to 9:1, *P* did not remain const. Usually, at the ratios 2:8 and 8:2, *P* was greater and at the ratio 5:5 smaller than at 10:0 and 0:10. The depression of *P* may be due to incipient coacervation. The viscosity η of mixed starch-agar sols was additive. The relative η of 0.40% starch and 0.102% agar was 1.21; of 0.60% and 0.134%, 1.49; and of 0.80% and 0.156%, 1.82. The η of the mixts. of the "equally viscous" sols deviated by 3% or less.

J. J. Bikerman

CA

2

Mixtures of hydrophilic colloids. II. Aging and thixotropy of starch-agar gels. A. A. Morozov, S. T. Ogorodnik, and V. P. Rudi (State Univ., Chernovits). *Kolloid. Zhur.* 13, 110-16(1951); cf. *C.A.* 45, 1844i.—The yield point *P* (g. wt./sq. cm.) of the gels was detd. from the depth of penetration of a loaded metal cone (cf. Segalova and Rebinder, *C.A.* 43, 7770c). When 1.3% agar gel (I) and 13% starch gel (II), both having *P* = 12.8, were mixed, the resulting gel (III) had *P* 10.6. After 9 days of aging, *P* of I, II, and III were 19.2, 2884, and 461, resp. Passage through a meat grinder lowered *P* of fresh specimens to 2.4, 4.7, and 3.8, resp., and aging of the minced specimens for 9 days raised *P* to 7.4, 942, and 35, resp. When the specimens were minced every day, *P* after the 8th mincing was 3.8, 8.9, and 7.9, resp., i.e. an increase in *P* occurs also when the structure formation is daily interrupted by mincing. Presumably, aging and thixotropic setting involve not only coagulation but also coacervation. J. J. Bikerman

RUDI, V.P.; MOROZOV, A.A.

Effect of surface-active substances on the properties of agar gels.
Kolloid.Zhur. 15, 117-24 '53. (MLRA 6:3)
(CA 47 no.17:8466 '53)

1. Univ. Chernovits.

MOROZOV, A.A.

Influence of oxygen on cuprammonium viscosity of cotton cellulose. A. A. Morozov and Z. L. Zosin (State Univ., Chernovitsy). Ukrain. Khim. Zhur. 19, 687-96(1953).—Cotton cellulose, untreated, extd. with equal vols. of EtOH and benzene, or bleached, was dissolved in 1.0% or 0.1% cuprammonium solns., and the viscosities were detd. at 20°, tube capacity 28.5 cc., time of effluence 2 to a few min., air pressure varied between 2.5×10^{-4} and 700 mm. Hg which corresponded to an O content of 0.90×10^{-9}-2.40×10^{-4} g. mol. O has a more destructive effect in 1.0% than in 0.1% cuprammonium soln. Extrapolating mol. wt. to the zero O content gave values from 1.4 to 1.5×10^{6} for extd., from 1.2 to 1.3×10^{6} for untreated, and from 5.5 to 6.0×10^{5} for bleached fibers. Possibly impurities have a catalytic affect on the depolymerization. A 0.1% cuprammonium soln. is recommended for the detn. of cellulose viscosities.

T. Jurecic

[redacted]PIROZHENKO, A.V.

Cold dyeing without drying of the azotol-treated fabric. Obm. tekh.opyt. [MLP] no.10:8-9 '56. (MIRA 11:11)
(Dyes and dyeing--Cotton)

MOROZOV, A.A.

[redacted]

Vat dyeing. Obm.tekh.opyt. [MLP] no.10:11-13 '56. (MIRA 11:11)
(Dyes and dyeing--Cotton)

MOROZOV, A.A.

The change in physicochemical properties of agar-agar
gels on addition of alcohol. V. P. Rudi and A. A. Morozov.
Uchenye Zapiski Chernovitsk. Univ. 21, 3-10(1956).—The
change in both viscosity and limiting shearing stress, P_m, of
agar-agar gels was studied on addn. to the aq. medium of
variable amts., ≤0.3 mole/l., of Me, Et, Pr, Bu, and Am
alcs. Phys. and chem. properties of the agar-agar used are
given: H_2O 35-7%, S 1.4%; mol. wts. and degrees of
polymerization $M = 26,350$, $n = 15-17$, and $M = 71,150$,
$n = 49$, resp., for the H_2O-sol. and -insol. fractions. Ac-
cording to plots of P_m vs. amts. of alc. added and $\Delta P_m\%$
vs. no. of C atoms in the alc. added, P_m decreases on addn.
of small amts. of alc., the effect of the latter decreasing with
increasing mol. wt. According to viscometric studies, the
viscosity and the ratio b/a of the axes of the agar-agar
ellipsoid mol. increase on addn. of alc. Tabulated data
show the soly., the wettability, the ratio b/a, and the electro-
kinetic potential of the agar to be affected more seriously
when the mol. wt. of the alc. is low, whereas its shearing
stress is affected inversely. On addn. of small amts. of alc.
to agar-agar gels, the hydration of the macromols. increases,
the solidity of the gel decreases, and the length of the mols.
increases. The interaction of the alc. mols. with agar-agar
proceeds by means of nonpolar groups, the oriented water
mols. satg. the field of forces of polar groups.

E. Matarasso-Tchiroukhine

4

[illegible]

STAVROV, S.N.; MOROZOV, A.A.

Effect of the nature of cations on the properties of the anionic polyelectrolyte agaroid. Ukr. khim. zhur. 23 no.6:721-727 '57.
(MIRA 11:1)

1.Odesskiy gosudarstvennyy universitet im. I.I. Mechnikova i Chernovitskiy gosudarstvennyy universitet.
(Ion exchange) (Electrolytes)

MOROZOV, A.A.

Finishing and dyeing of sateen fabrics is improving. Tekst. prom. 18 no.2:55-56 F '58. (MIRA 13:3)

1. Nachal'nik tsekha otdelochnoy fabriki Kanskogo khlopchatobumazhnogo kombinata.

(Dyes and dyeing--Cotton) (Cotton finishing)

AUTHORS: Morozov, A.A., Stavrov, S.N. 69-58-2-11/[illegible]

TITLE: The Effect of Cations on the Properties of Black Sea Agaroid
(Vliyaniye kationov na svoystva chërnomorskogo agaroida)

PERIODICAL: Kolloidnyy zhurnal, 1958, Vol XX, Nr 2, pp 194-198 (USSR)

ABSTRACT: The use of agar-agar, agaroid, and other extracts of red sea plants is based on their ability to form durable gels. Agaroid is prepared from the Black Sea plant Phyllophora nervosa and is a natural cation exchanger. Its technological properties may be changed by the replacement of the cation contained in it. The change of the equivalent electric conductivity is characteristic for weakly dissociated low-molecular compounds. According to the degree of dissociation, the following order can be established: Li Na K initial product Ca Ba. The higher the degree of dissociation (figure 4) the higher the viscosity of the solution in water (figure 1), and the swelling in water (figure 3) the lower the gel formation ability (figure 2). The interaction of the molecules in the solution is increased by the transition from Li-agaroid to Ba-agaroid, which leads to their coagulation in diluted solutions and to structure formations in concentrated solutions. The classification of florideae extracts according to swelling is not practical. The dif-

Card 1/2

69-58-2 -11/23

The Effect of Cations on the Properties of Black Sea Agaroid

ference in the extract properties is caused by the charge on the high-molecular anion. The most important characteristic is therefore the number of sulfate groups per weight unit of the substance.
There are 4 graphs and 21 references, 14 of which are Soviet, 6 English and 1 French.

ASSOCIATION: Odesskiy gosudarstvennyy universitet imeni I.I. Mechnikova (Odessa State University imeni I.I. Mechnikov) Chernovitskiy gosudarstvennyy universitet (Chernovtsy State University)

SUBMITTED: January 3, 1957

1. Oceanography 2. Chemistry 3. Gels--Formation 4 Plants --Applications

Card 2/2

MOROZOV, A. A.; DRANITSKAYA, R. M.; TSUGUY, Ye. K.

"The Division of Green and Violet Modifications of Chromium Sulfate."

report presented at the Section on Colloid Chemistry, VIII Mendeleyev [illegible]
General and Applied Chemistry, Moscow, 16-23 March 1959.
(Koll. Zhur. v. 21, No. 4, pp. 509-511)

MOROZOV, A. A. and STAVROV, S. N.

"The Results of the Investigations of Cation-Substituted Specimens of Black Sea Agaroid and White Sea Agar-Agar."

report presented at the Section on Colloid Chemistry, VIII Mendeleyev Congress on General and Applied Chemistry, Moscow, 16-23 March 1959,
(Koll. Zhur. v. 21, No. 4, pp. 509-511)

[illegible]

AUTHORS: [illegible], A. A.

TITLE [illegible]

PERIODICAL: [illegible]

ABSTRACT: [illegible]

Card [illegible]

[illegible]

ASSOCIATION: [illegible]

SUBMITTED: [illegible]

Brief Communications. Quantitative Deter- [illegible]
mination of Zn by Precipitation Chromatography SOV/75-13-[illegible]

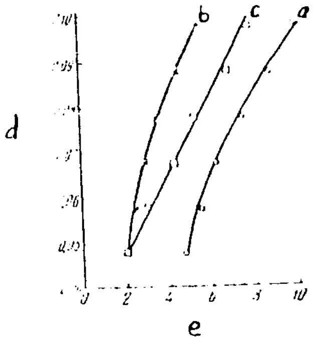


Fig. A. Correlation between the width of Zn [illegible] concentration: (a) on separating Zn^{2+} - Cr^{3+}, [illegible] hours; (b) on separation of Zn^{2+} - Cr^{3+} - H[illegible], [illegible] 15 hours; (c) on separating Zn^{2+} - Cr^{3+} - A[illegible], [illegible] hours; (d) Zn^{2+} concentration in moles; (e) [illegible] in mm.

Card 3/4

Brief Communications. Quantitative Determination of Zn by Precipitation Chromatography

77761
SOV/75-15-1-[illegible]

Table 1. Width of ZnS zones for the investigated solutions: (a) solutions; (b) Zn²⁺ concentration in solution (in moles); (c) width of ZnS zone (in mm); (d) average; (e) known concentration for the calibration graph; (f) unknown concentration.

a	b	c 1	c 2	c 3	c 4	d
e	0,0976	10	10	—	—	10
	0,0876	8,5	9	—	—	8,75
	0,0776	7	8	—	—	7,5
	0,0676	6,5	6	—	—	6,25
	0,0576	5,5	5,5	—	—	5,5
	0,0476	4,5	5	—	—	5,75
f	X_1	8,5	8	8	8,5	8,25
	X_2	5,5	5	6	5,5	5,5
	X_3	7	7,5	7,5	7	7,25

Card 4/4

MOROZOV, A.A.; STAVROV, S.N.

Study of cation-substituted samples of agar-agar. Koll. zhur. 22 no.4:429-433 Jl-Ag '60. (MIRA 13:9)

1. Odesskiy universitet im. I.I. Mechnikova i Chernovitskiy universitet.
(Agar)

[illegible], A.A.; [illegible], V.I.; [illegible], V.V.; [illegible], Ye.A.

Investigation of the [illegible] properties of the SC-1 carboxylic cation exchanger. [illegible] zhur. 27 no.6:750-754 '[illegible]. (MIRA 14:11)

([illegible])

DRANITSKAYA, R.M.; GAVRIL'CHENKO, A.I.; MOROZOV, A.A.

State of germanium and arsenic in solutions and their separation by means of ionic exchange. Ukr.khim.zhur. 28 no.7:866-870 '62. (MIRA 15:12)

1. Odesskiy gosudarstvennyy universitet im. I.I.Mechnikova.
(Germanium) (Arsenic) (Ion exchange)

S/073/62/028/009/009/011
A057/A126

AUTHOR: Morozov, A. A.

TITLE: Fifth All-Union conference on colloid chemistry

PERIODICAL: Ukrainskiy khimicheskiy zhurnal, v. 28, no. 9, 1962, 1111

TEXT: The Fifth All-Union conference on colloid chemistry was convened to Odessa by the chemical department of the Academy of Sciences of USSR, AS UkrSSR, the Odesskiy gosudarstvennyy universitet (Odessa State University), MV SSO USSR and VKhO im. D. I. Mendeleyeva from May 31 to June 6, 1962. At the four plenar meetings reports were given by the following colloid scientists: Academicians of the AS USSR P. A. Rebinder and M. M. Dubinin, Academician of the AS UkrSSR F. D. Ovcharenko, Corresponding Member of the AS USSR B. V. Deryagin and others. In the conference participated also the senior colloid scientist Academician of the AS UkrSSR A. V. Dumanskiy and about 1,200 scientists from various Soviet towns and from Bulgaria, Eastern Germany and Hungary. The reports were divided into the following fields: 1) Surface phenomena in disperse systems, formation and stability of disperse systems; 2) Adsorption; 3) Formation of structures

Card 1/2

Fifth All-Union conference on colloid chemistry S/073/62/028/009/009/011
A057/126

and physico-chemical mechanics; 4) Disperse systems in polymers, and 5) Semi-colloids, surface-active substances and emulsions. At the conference were demonstrated successful developments of various problems of the colloid chemistry in several institutes of the AS USSR and academies of the union republics. Positively appraised were investigations carried out at the Odessa State University, while it was said that investigations on colloid-disperse systems do not develop satisfactorily in the Central Asian republics and Siberia. The high scientific level of several theoretical reports was pointed out, but it was mentioned that results of such investigations are insufficiently used by the industry. For further development of the colloid chemistry in the USSR the conference decided upon some measures against poor organization and for the increased application of this part of science in the national economy.

Card 2/2

L 4501-66 EWT(d)/T/EWP(1) IJP(c) BB/GG

ACC NR: AP5023268

UR/0302/65/000/003/0023/0025
681.142.63

49
B

AUTHOR: Kuznetsov, V.K.44; Morozov, A.A.44

TITLE: The realization of program interruptions on universal digital computers

SOURCE: Avtomatika i priborostroyeniye, no. 3, 1965, 23-25

TOPIC TAGS: computer program, automatic programming, automatic computer programming, digital computer, computer component, computer circuit

ABSTRACT: During the use of 15,44 digital computers in automatic control systems, 14 the need for interruption programs often arises. Since the computer can operate with only one of the external devices at a time, the interruption program from a device with a higher priority can interrupt and stop the carrying out of the program of a device having a lower priority. For such uses of the "Minsk-2" universal computer the Institut kibernetiki AN Ukr. SSR (Institute of Cybernetics AN Ukr SSR)44 developed a circuit for the interruption of low priority programs. The paper outlines the block diagram of the interrupting device and of the basic interrupter component, and describes the operation of the device. The circuits are simple and reliable in operation. Orig. art. has: 3 figures.

ASSOCIATION: none

Card 1/2

L 4501-66

ACC NR: AP5023268

SUBMITTED: 00 ENCL: 00 SUB CODE: DP, IE

NO REF SOV: 000 OTHER: 000

8C

Card 2/2

L 10994-66 EWT(m) DIAAP

ACC NR: AP6000143 SOURCE CODE: UR/0225/65/000/005/0007/0009

36

AUTHOR: Smorodinov, M. I.; Morozov, A. A.

ORG: none

19

TITLE: The use of radioisotopes in determining soil density and moisture content

SOURCE: Osnovaniya, fundamenty, i mekhanika gruntov, no. 5, 1965, 7-9

TOPIC TAGS: soil property, density determination, moisture determination, radioactivity measurement, nuclear physics apparatus, density gauge, radioisotope, measuring apparatus / GP-1 density gauge

ABSTRACT: The GP-1 16 underground density gauge 10 (see fig. 1) enables measurement of the soil density through the measurement of scattered gamma rays. The use of this instru-

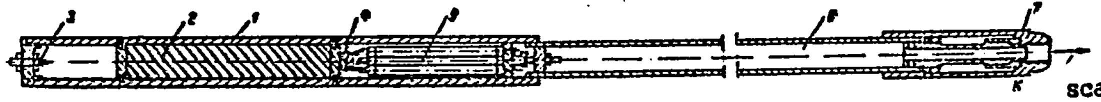


Fig. 1. GP-1 gauge for determining soil density. 1--duraluminum tube; 2--lead shield; 3--gamma ray source; 4--retaining spring; 5--counters; 6--cathode follower; 7--handle.

UDC: 624.131.4 : 539.163

Card 1/2

L 10994-66

ACC NR: AP6000143

ment requires only one borehole. A Co-60 source located in the lower part of the instrument is separated by a lead shield from the detector in the upper part of the probe. The VG-1 gauge--which resembles the GP-1 probe--was developed for moisture measurements. A plutonium-berylium fast neutron source is used with the activity of 3.78×10^5 n/sec. The amount of water is based on the measurement of thermal neutrons produced by the interaction of fast neutrons with hydrogen containing compounds--primarily water. The instruments are calibrated in the laboratory by means of standard soil mixtures with fixed moisture content. Using the same calibration graph the moisture monitor can be used with ±1.5% accuracy in different soils. Orig. art. has: 6 figures.

SUB CODE: 20,08 SUBM DATE: 00/ ORIG REF: 000/ OTH REF: 000

Card 2/2

L 18326-65 EEO-2/EWT(d)/FSS-2/EWT(l)/EEC-4/EEC(t)/EED-2/EWA(h) Pn-4/Pp-4/
Pac-4/Pep/Pl-4
ACCESSION NR: AP4048445 S/0106/64/000/010/0025/0033

AUTHOR: Kuleshov, V. N.; Morozov, A. A. B

TITLE: Transmission of signal and noise by frequency detectors 25
8 15

SOURCE: Elektrosvyaz', no. 10, 1964, 25-33

TOPIC TAGS: frequency detector, signal plus noise transmission

ABSTRACT: An exact solution of the problem of finding the energy spectrum of the FM-detector output voltage, when the detector is fed with a signal mixed with an additive noise, has been very cumbersome. An approximate solution by the symbolic method, with a high signal-to-noise ratio assumed at detector inputs, is suggested. This case is important in AFC-system calculations. The signal off-central-frequency position is taken into account, and the effect of limiting on the output-noise spectrum is investigated. A formula is developed for the energy spectrum of a balanced frequency detector (with and without a limiter) having

Card 1/2

L 18326-65
ACCESSION NR: AP4048445

2

detuned circuits, harmonic signal, and white noise. Two particular circuits are calculated. "The authors wish to thank Professor S. I. Yevtyanov and Associate Professor M. V. Blagoveshchenskiy for going over the manuscript and their valuable comments." Orig. art. has: 5 figures and 54 formulas.

ASSOCIATION: none

SUBMITTED: 18Apr64

ENCL: 00

SUB CODE: EC

NO REF SOV: 006

OTHER: 004

Card 2/2

L 56498-65 EWT(d)/EWT(m)/EWA(d)/EWP(v)/EWP(t)/EWP(k)/EWP(h)/EWP(b)/EWP(l)/EWA(c)
ACCESSION NR: AP5017796 Pf-4 JD/HW UR/0286/65/000/011/0018/0019
621.774.36

24
B

AUTHOR: Morozov, A. A.; Sarychev, O. A.

TITLE: A mill for cold rolling pipe. Class 7, No. 171368

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 11, 1965, 18-19

TOPIC TAGS: pipe manufacture, cold rolling, rolling mill

ABSTRACT: This Author's Certificate introduces: 1. A mill for cold rolling pipes. The device includes a working stand and a mechanism for feeding and rotating the pipe. The mill is designed for high capacity production. The working stand consists of a heavy gauge cylindrical yoke with a slider inside it. Four sets of working tools are mounted around the slider. Also included in the working stand are a central bar fastened rigidly to the front and rear covers, and a lever drive for the slider. 2. A modification of this mill in which the working tool is made in the form of three rollers in separators. The two outside rollers are in contact with support plates mounted in the yoke of the working stand. The inside roller is in contact with a support plate fastened to the stationary central bar.

Card 1/3

L 56498-65

ACCESSION NR: AP5017796

0

ASSOCIATION: none

SUBMITTED: 20Oct62 ENCL: 01 SUB CODE: IE

NO REF SOV: 000 OTHER: 000

Card 2/3

L 21811-66 EPF(n)-2/EEC(k)-2/EWT(1) AT/GS/WH

SOURCE CODE: UR/0000/65/000/000/0138/0143

ACC NR: AT6004613

AUTHOR: Morozov, A. A.

53

B+1

ORG: none

21, [redacted]

TITLE: Nuclear resonance generator with dynamic polarization of nuclei in the magnetic field of the earth

SOURCE: Leningrad. Universitet. Yadernyy magnitnyy rezonans (Nuclear magnetic resonance). no. 1, 1965, 138-143

TOPIC TAGS: nuclear magnetic resonance, polarized signal, signal to noise ratio, Q factor

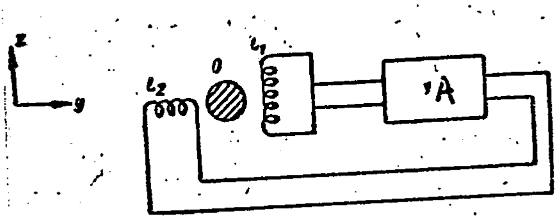
ABSTRACT: The author analyzes the operation of a nuclear resonance generator which incorporates dynamic polarization of nuclei produced by the Overhauser effect. Formulas are given for calculating the resonant frequency and Q of the tank circuit to produce sustained nuclear precession. Deviations from this resonant frequency must be controlled to prevent field measurement errors due to pulling of the generation frequency by the receiving circuit. It is shown that the Q of the tank circuit is determined by the range of magnetic fields measured without returning the

Z

9M

Card 1/3

circuit and by the error due to pulling of the generator frequency. In order to increase the range of fields which may be measured and reduce pulling, a nuclear resonance generator may be used in which high Q tank circuits are not required for excitation of oscillations. The specimen 0 (see figure) which is located in a field H_0 is placed inside two coils L_1 (receiving) and L_2 (feedback) perpendicular to each other and to the field H_0 so that there is no direct inductive coupling between them. L_1 is connected to the input of amplifier A, L_2 is connected to the amplifier output. Conditions are given for selecting phase relationships to produce sustained nuclear precession in this type of generator. An examination of these conditions for self excitation shows that a generator with a feedback coil does not require a tank circuit. This generator may not be used for measurements in weak magnetic fields since the static nuclear magnetization in these fields is extremely small and the amplitude of the nuclear induction signal is considerably below the level of inherent



L 21811-66
ACC NR: AT6004613

0

instrument noises. The nuclear signal may be amplified by dynamic polarization of nuclei until the signal to noise ratio reaches values above unity. The signal to noise ratio may be further increased by using a tuned circuit at the amplifier input. A formula is given for finding the Q of this circuit. A block diagram is given for the complete nuclear resonance generator with dynamic polarization. Orig. art. has: 9 formulas, 2 figures.

SUB CODE: 20/ SUBM DATE: 03Nov65/ ORIG REF: 007/ OTH REF: 006

Card 3/3 PB

KIPSHIDZE, Z.Sh.; MOROZOV, A.A.

Attachment to an analog computer for determining self-correlated and mutually-correlated functions. Trudy Vych. tsentra AN Gruz. SSR 6:1 :4-58 '65. (MIRA 19:1)

L 9888-66 EWT(1)/EWA(h)
ACC NR: AP5028462

SOURCE CODE: UR/0286/65/000/020/0029/0030

INVENTOR: Morozov, A. A.

27
B

ORG: none

TITLE: Nuclear-resonance generator. Class 21, No. 175534

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 20, 1965, 29-30

TOPIC TAGS: nuclear resonance, nuclear precession, magnetic detection

15

ABSTRACT: This Author Certificate proposes a nuclear-resonance generator for producing continuous signals of nuclear precession in the Earth's magnetic field. It consists of an ampul containing the working medium, a receiving coil connected to the amplifier input, and a feedback coil connected to the amplifier output. The coils are mounted perpendicularly to each other and to the Earth's magnetic field. To increase both the range of measurement and the signal-to-noise ratio and to reduce the pulling of frequency, the generator is equipped with an hf oscillator and an hf circuit, which induce dynamic polarization of nuclei of the working medium. The feedback coil is connected to the amplifier output through a phase regulator. Orig. art. has: 1 figure. [JR]

SUB CODE: 18 SUBM DATE: 29Jan64/ ATD PRESS: 4165

Card 1/1

UDC: 621.373.42
621.389.550.83

2

VASIL'YEV, Yu.S., dots., kand. tekhn. nauk; VEL'NER, Kh.A., dots., kand. tekhn. nauk; GINDUS, D.O., inzh.; GOLOVACHEVSKIY, N.I., dots., kand. tekhn. nauk; GROMOV, A.I., inzh.; DOMANSKIY, L.K., inzh.; ISAYEV, Yu.M., inzh.; KULESH, N.P., dots., kand. tekhn. nauk; MIKHALEV, B.N., dots., kand. tekhn. nauk; MOROZOV, A.A., prof., doktor tekhn. nauk [deceased]; NALIMOV, S.M., st. nauchn. sotr., kand. tekhn. nauk; REZNIKOVSKIY, A.Sh., kand. tekhn. nauk; SVANIDZE, G.G., doktor tekhn. nauk; TANANAYEV, A.V., dots., kand. tekhn. nauk; KHAZANOVA, A.Z., inzh.; CHERNYATIN, I.A., st. nauchn. sotr., kand. tekhn. nauk; SHCHAVELEV, D.S., prof., doktor tekhn. nauk; YAGODIN, N.N., st. nauchn. sotr., kand. tekhn. nauk; LEONOVA, B.I., red.

[Utilization of water power] Ispol'zovanie vodnoi energii. Moskva, Energiia, 1965. 563 p. (MIRA 19:1)

ACC NR: AP7002634 (A, N) SOURCE CODE: UR/0413/66/000/023/01[illegible]/0185

INVENTOR: Grigor'yev, Yu. P.; Morozov, A. A.

ORG: None

TITLE: A device for determining the most significant digit in the difference between two binary numbers. Class 42, No. 134071

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 23, [illegible], 185

TOPIC TAGS: binary number, digital system, computer component

ABSTRACT: This Author's Certificate introduces a device for determining the most significant digit in the difference between two binary numbers being compared by digits. The device is simplified and its speed is increased by connecting the inputs to an exclusive OR circuit which is connected through a blocking circuit to the generators of the "ones" connected to the second inputs of the corresponding cells in the blocking circuit. The inputs of the device are also connected to switches with their second inputs tied to the output of the exclusive OR circuit and their outputs connected through shift circuits to the memory circuit which serves as the output for the device.

SUB CODE: 09/ SUBM DATE: 07Mar60

Card 1/1

ACC NR: AP7004650 (A,N) SOURCE CODE: UR/0432/66/000/001/0013/0015

AUTHOR: Kuznetsov, V. K.; Morozov, A. A.

ORG: none

TITLE: Program interrupt during access to magnetic tape

SOURCE: Mekhanizatsiya i avtomatizatsiya upravleniya, no. 1, 1966, 13-15

TOPIC TAGS: computer storage, computer control system, magnetic tape, COMPUTER PROGRAM

ABSTRACT: The Institute of Cybernetics of the Academy of Sciences UkrSSR has designed a program-interrupt unit for use with the Minsk-2 and Minsk-22 computer magnetic tape memory. The program-interrupt unit coordinates the exchange of information between the arithmetic unit and various memory types whose maximum waiting times differ into maximum time during which information may be stored in a memory unit without loss. Since the waiting time fof magnetic tape memory is practically infinite and of other units is as the order of tens or hundreds of milliseconds, it is most expedient to interrupt during magnetic tape memory access with subsequent unconditional transfer back to the tapc memory. The program and hardware (using standard Minsk-2 computer circuits) required for this function are described. Orig. art. has: 1 figure. [BD]

SUB CODE: 09/ SUBM DATE: none

Card 1/1 UDC: 681.142.63

28(5)

AUTHOR: Morozov, A. D. SOV/64-59-3-22/24

TITLE: Application of a Double Frame Stirrer in Polymerization Reactors (Primeneniye dvoynoy ramnoy meshalki v polimerizatsionnykh reaktorakh)

PERIODICAL: Khimicheskaya promyshlennost', 1959, Nr 3, p 87 (USSR)

ABSTRACT: The simple stirrers used at present in reactors for emulsion polymerization, have little effect and therefore reduce the capacity of the reactor, but increase the consumption of emulsifiers and prevent a reduction of the feeding modulus (M) (volume ratio between monomer and water medium). In the Simferopol'skaya galantereynaya fabrika (Simferopol' Haberdashery Goods Plant) a double frame stirrer which did away with most of the above mentioned drawbacks was attached to the polymerization reactor. The two frames of the stirrer rotate in opposite directions. (M) could be reduced to 1 : 1.33 in the emulsion polymerization of methyl methacrylate, the consumption of the emulsifier could be reduced by 50%, and the output of polymethyl methacryl powder could be increased from 78.8 to 90.4%.

Card 1/1

79457
S/081/61/000/017/164/166
B117/B110

15 9201

AUTHORS: Morozov, A. D., Epshteyn, V. G., [illegible], L. A., [illegible], G. N.

TITLE: Properties of combined systems of different rubbers with resins obtained in the condensation of aromatic amines and formaldehyde

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 17, 1961, 96, abstract 17П316 (Uch. zap. Yaroslavsk. tekhnol. in-ta, v. , 1960, 115 - 12)

TEXT: The properties of combined systems of СКС-30 (SKS-30), СКН-18 (SKN-18) and СКН-26 (SKN-26) and formaldehyde aniline resins obtained by rolling lie between those of rubbers and those of plastics: increased modulus and strength, reduced relative and permanent extension, high hardness with good impact strength, high resistance to gasoline and frost. The SKS-30-vulcanizates with formaldehyde aniline resin are sufficiently temperature stable and resistant to thermal ageing. An increase in the HCOH-to-aniline ratio in the resin causes a higher gasoline resistance of

X

Card 1/2

4457

S/081/61/000/011/062/[illegible]

Properties of combined fillers of .. B117/B110

the vulcanizates. If the formaldehyde aniline resin content is increased to 120 parts by weight, the swelling of the SKS-30-vulcanizates in the gasoline is reduced to one third. At the same time the brittle point is increased only by 10°. With increased filling the critical strain up to which the vulcanizate follows Hooke's law, increases. A substitution of the aniline portion by n-toluidine increased the strengths of the vulcanizates, the moduli and the resistances to wear, and also increased the plasticity of the mixture. [Abstracter's note: Complete translation.]

Card 2/2

MAYEVSKAYA, V.M., kand.tekhn.nauk; MOROZOV, A.D., inzh.; SVIRIDONOV, A.A., tekhnik

The ATE-1 thermoelectric anemometer. Bezop.truda v prom.6 no.11:22-23
N '62. (MIRA 16:2)

1. Vostochnyy nauchno-issledovatel'skiy institut po bezopasnosti
rabot v gornoy promyshlennosti.

(Anemometer)

MAYEVSKAYA, V.M., kand. tekhn. nauk; MOROZOV, A.D., inzh.;
SVIRIDONOV, A.A., tekhnik

The ATE-1 thermoelectric anemometer for measuring low velocities of air in a mine. Nauch. soob. VostNII no.1:63-67 '61.
(MIRA 18:5)

VOLOSYUK, V.M.; KRYAZH, I.Z.; MIRIANASHVILI, V.V.; MOROZOV, A.F.;
KANDIYEVA, Ye.V., red.; SOKOLOVA, N.N., tekhn. red.

[There will be millions of chicks for meat] Budut milliony miasnykh tsypliat. Literaturnaia zapis' N.I.Koneva. Moskva, Sel'khozizdat, 1962. 53 p. (MIRA 16:5)
(Poultry)

MOROZOV, A.F.

11(4) PHASE I BOOK EXPLOITATION SOV/1068

Nauchno-tekhnicheskoye obshchestvo neftyanoy promyshlennosti

Puti razvitiya gazovoy promyshlennosti SSSR; materialy Vsesoyuznogo soveshchaniya (Trends in the Development of the Gas Industry in the USSR; Materials Presented at the All-Union Conference) Moscow, Gostoptekhizdat, 1958. 432 p. 3,000 copies printed.

Eds.: A.D. Brents, [illegible], F.G. [illegible], Ya.A. Krems, V.I. Popov, V.I. [illegible], N.I. [illegible], F.A. [illegible], A.S. [illegible]; Exec. Eds.: N.I. [illegible] and N.M. [illegible]; Tech. Ed.: E.A. Mukhina; Editorial Board: N.V. Sidorenko (Chief Ed.), K.S. [illegible], Ya.A. Krems, V.I. [illegible], and N.I. [illegible].

PURPOSE: The book is intended for specialists engaged in the production and gathering of natural gas, the extraction of gas from coal and shale, the construction and operation of trunk gas pipelines, gas supply to cities, and the processing of gas.

COVERAGE: The authors review the basic trends in the development of the USSR gas industry, the prospecting and exploration of new gas deposits, the gasification of solid fuels, the gathering and utilization of natural gas, the automation of gas field operations, the exploitation of gas wells, and ways to increase output. They further discuss the processing of natural gas with application of refrigeration, the experience gained in the laying and operating of trunk gas pipelines, the automation of gas pipeline operation, and underground gas storage facilities. There are no references.

TABLE OF CONTENTS:

Trends in the Development of the Gas (Cont.) SOV/1068

Surov, V. P. Production of Active Carbon Black Obtained From Liquid Hydrocarbon Crude Stock in a Furnace 364

Morozov, A. F. Utilization of Auxiliary Power Resources in Producing Carbon Black From Gas 367

Chatskis, A. I. Automation and Centralized Control at Plants Producing Carbon Black From Gas 369

Brents, A. D., and A. L. Babkina. Principal Economic Tasks of the Gas Industry 372

Bakhmana, Ya. I. Economic Indices of Urban Gas Supplies 379

Afanas'yev, A. S. Some Economic Problems in the Chemical Conversion of Natural Gases 387

Shishakov, N. V., V. S. Al'tshuler, and S. A. Feygin. Economics of the Production of High-calorie Gas by the Utilization of Complex Gas Chemicals From Solid Fuel 395

Card 10/11

S/135/60/000/010/012/015
A006/A001

AUTHORS: Kheyfits, D. P., Engineer, Barreras, B., Morozov, A. F., Shpan'ko, G. F., Technicians

TITLE: A Modernized Burner for Welding Thin Metal in Carbon Dioxide 18

PERIODICAL: Svarochnoye proizvodstvo, 1960, No. 10, p. 32

TEXT: A simplified design of a burner for welding in carbon dioxide was developed on the basis of the TsNIITMASh burner and introduced at the Moscow "Gidrooborudovaniye" experimental machine-plant. The burner has the following particular features: 1. Non-ferrous metal parts were partially eliminated; 2. The cooling system was improved thus preventing scorching of the interchangeable burner; 3. The burner has a lighter weight, facilitating its operation. The burner nozzle is made of M1 copper and cooled by running water, circulating between the nozzle and a bushing soldered to it. For the in- and outflow of water to the nozzle copper pipes are used. The carbon dioxide gas enters the welding area through 4 apertures in the ДШ5 (DSh5) holder tip. The nozzle is fixed by a disk and a nut, insulated with asbestos cement gaskets. An exchangeable tip from the ДШ-5(DSh-5) holder is used in the burner. The carbon

Card 1/2

S/135/60/000/010/012/015
A006/A001

A Modernized Burner for Welding Thin Metal in Carbon Dioxide

dioxide gas is supplied to the burner from a cylinder through a hose mounted in the handle and passes through the heater, reductor and a drying device. The tip must be inserted into the nozzle to 10 - 15 mm depth. The throat depth of the electrode from the burner must not exceed 40 mm at an arc ignition of 160 - 180 amps current. During welding the electrode throat is 20 - 25 mm. The burner can be easily assembled and dismounted. Tests made with the burner yielded satisfactory results when welding butt and overlap joints of 4 mm thick "3" grade steel, at 180 amps current and 2 mm diameter Св-10ГС (Sv-10GS) wire. There is 1 figure.

Card 2/2

YEVTEYEV, I.N., inzh.; MOROZOV, A.F.

Wear-resistant hard facing of dredger part by cast iron. Svar. proizv. no.6:38-39 Je '61. (MIRA 14:6)

1. Institut "Orgstroy" Ministerstva stroitel'stva RSFSR.
(Dredging machinery)
(Hard facing)

MOROZOV,A.F., inzhener

Testing of the OV-10 and VS-8 grain cleaning machines. Sel'khozmashina no.8:6-9 Ag'55. (MLRA 8:11)
(Grain--Cleaning) (Agricultural machinery--Testing)

MOROZOV, A.F., inzhener.

Results of testing SUTK-47 and SZTU-47 drills. Sel'khozmashina no.11:7-10 N '56. (MLRA 9:12)

1. TSentral'naya mashinoispytatel'naya stantsiya.
(Drill (Agricultural implement))

VASILENKO, I.F., akademik; AVDEYEV, N.Ye., inzh.; MOROZOV, A.F., inzh.; SOLOV'YEV, V.M., kand.tekhn.nauk; KRYUKOV, V.L., red.; MAKHOVA, N.N., tekhn.red.; BALLOD, A.I., tekhn.red.

[Grain combines of the U.S.S.R. and foreign countries; theory and analysis of contruction] Zernovye kombainy SSSR i zarubezhnykh stran; teoriia i analiz konstruktsii. Pod red. I.F.Vasilenko. Moskva, Gos. izd-vo sel'khoz. lit-ry, 1958. 294 p. (MIRA 11:12)

(Combines (Agricultural machinery))

SOV/48-23-9-50/57

24(7)

AUTHORS: Bogomolov, S. G., Drobiz, F. L., Morozov, A. G.

TITLE: The Spectroscopic Determination of the Microelements in Tissue Albumins

PERIODICAL: Izvestiya Akademii nauk SSSR. Seriya fizicheskaya, 1959, Vol 23, Nr 9, pp 1158 - 1159 (USSR)

ABSTRACT: In the present paper animal albumins are investigated with respect to Co, Ni, and Cu, which are present within a concentration range of 0.1 - 0.001%. The albumins were extracted from various organs of white rats, were washed in alcohol, acetone, and ester and were then converted to ashes. After 20-fold enrichment the samples were investigated according to the method of three standards in a spectrograph of the type ISP-22. The sample was located in the crater of the lower carbon electrode. For the construction of the calibration curve synthetic standards were used, the setting of which is discussed in detail. The base material of these standards consisted of salts, to which Co-, Ni- and Cu-compounds were added in suitable quantities. For reasons of comparison, samples and standards of a vanadium compound (V_2O_5) were added. Reproducibility showed an arithmetical error of ± 5%. It is said in the summary that,

Card 1/2

The Spectroscopic Determination of the Microelements in Tissue Albumins SOV/48-21-9-30/57

in the case of the subcutaneous injection of chlorine salts of certain microelements, the content of these microelements in the albumins of some organs is greater than that in the corresponding organs of control animals. Co-, Ni-, and Cu-salts introduced into the body of animals are selectively enriched in the albumins of some organs. The accumulations are accompanied by an increase of the SH-groups, which confirms the opinion concerning a connection existing between the introduced microelements and the SH groups. There are 1 table and 5 Soviet references.

ASSOCIATION: Sverdlovskiy meditsinskiy institut (Sverdlovsk Medical Institute)

Card 2/2

SAVICH, B.; MOROZOV, A.G.

Large scale vaccination for sheep with dry brucellosis vaccine from strain no.19. Veterinariia 33 no.10:44-48 O '56. (MIRA 9:10)

1. Direktor Pyatigorskogo mezhsovkhoznoy vetbaklaboratorii (for Savich). 2. Zaveduyushchiy protivobrutselleznym otdelom laboratorii (for Morozov).

(Stavropol Territory--Brucellosis in sheep--Preventive inoculation)
(Vaccines)